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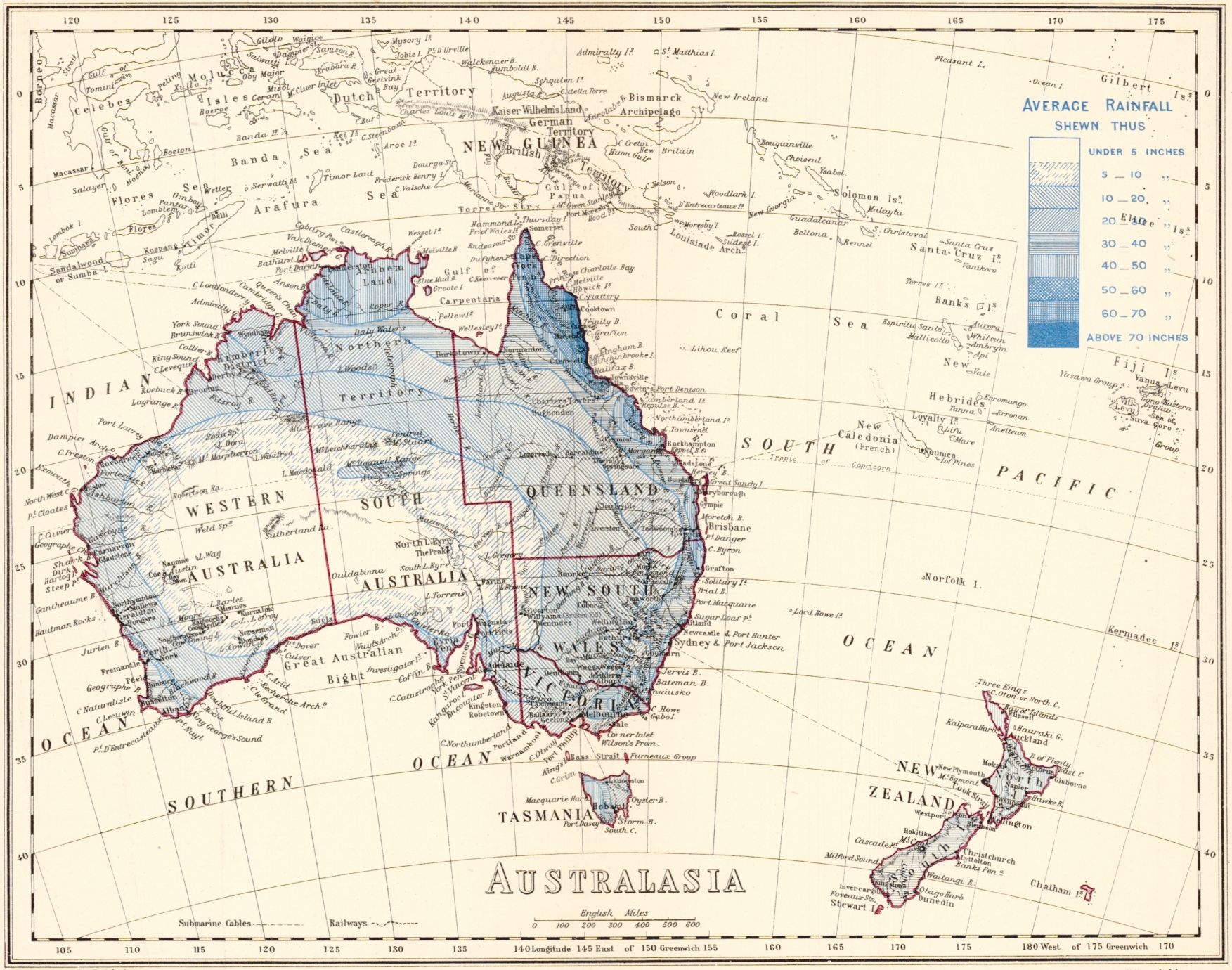
THE SEVEN COLONIES OF AUSTRALASIA.



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A

STATISTICAL ACCOUNT

OF THE

SEVEN COLONIES OF AUSTRALASIA,

1897-8,

BY

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SEVENTH ISSUE.

Sydney:

WILLIAM APPLEGATE GULLICK, GOVERNMENT PRINTER.

1898.

22110

PREFACE.

THE following pages aim at giving an idea of the progress and present condition of the seven colonies of Australasia, such as may be gathered from an account of which statistics are the basis. The information given extends back, in some instances, to the very beginning of settlement; but, as a rule, the year 1861 has been made the starting-point of the comparisons that serve to illustrate the text, as that year was the first in which a census was taken after the acquisition of responsible Government by all the colonies except Western Australia, and also because it virtually marks the beginning of the present system of Australasian colonisation, which began to take shape after the subsidence of the excitement following on the great gold discoveries of the fifties.

At the beginning of the year 1861, the population of Australasia, excluding the uncivilised native races, numbered 1,221,274, which is less than that of New South Wales at the present time, and but little greater than that of Victoria. The increase of population from 1861 to 1898 has been at the rate of about 3·53 per cent. per annum. During the greater part of this period the country largely gained by immigration; indeed, the stream of population was fairly well maintained until the close of 1891. It is a noteworthy fact that the years of the greatest prosperity of Australasia have also been those when the country received the largest accession of population from abroad; and though it cannot be said that the influx of population brought prosperity, it can fairly be assumed that the stream of immigration which was induced by the prosperity of the colonies tended to keep alive and stimulate the conditions without which national progress would have been impossible. The following is a statement of the population at the beginning of the years stated:—

1861	1,221,274
1871	1,898,871
1881	2,730,312
1891	3,785,133
1898	4,410,151

The Australasian people are mainly of British and Irish origin. Of the 3,762,410 persons whose birthplaces were ascertained at the census of 1891, 2,561,865 were of Australasian birth, while 589,683 were natives of England and Wales, 274,583 of Ireland, and 175,734 of Scotland, and 18,354 of other British possessions. The natives of Continental Europe and the United States numbered 101,689, and the Chinese, 40,502. Excluding the Chinese, who are not permanent settlers, and who do not intermarry with the general population, it may be claimed that over 95 per cent. of the population of the seven colonies are of British or Irish birth or descent.

The conditions of life are more favourable in Australasia than in any other country. The excess of births over deaths is somewhat less than 19 per thousand inhabitants. For the United Kingdom, it is a little over 11 per thousand; while the average European rate hardly reaches 10 per thousand.

The tonnage of shipping entered from and cleared for Great Britain and other ports outside of Australasia has very largely increased:—

	tons.
1861	1,076,856
1871	1,279,416
1881	3,153,087
1891	6,457,050
1897	7,337,494

Equally rapid has been the increase in the intercolonial shipping entered and cleared:—

	tons.
1861	1,751,628
1871	2,950,488
1881	5,790,458
1891	11,022,485
1897	13,973,126

In point of trade, Sydney is the fourth seaport of the British Empire, being exceeded in the value of its imports and exports by London, Liverpool, and Hull; Melbourne ranks sixth, following Glasgow, which is below Sydney. In the matter of tonnage entering, both Sydney and Melbourne stand very high, but not so high as in regard to the value of their trade.

The value of exports and imports is greatly relied upon by statisticians as giving a measure of a country's progress. The external trade of Australasia—that is, the value of imports and exports taken together—was :—

	£
1861	35,061,282
1871	39,729,016
1881	64,554,678
1891	84,651,488
1897	83,678,859

The fall shown between 1891 and 1897 is due to a decline in values, and not to a decrease in the quantities of goods exchanged. The decline, however, has been over the whole period, as will be seen below. The figures represent the value of a like quantity of exports in various years, the prices of 1897 being taken as equalling 1,000 :—

1861	2,233
1871	1,929
1881	1,609
1891	1,236
1897	1,000

It will be seen that what would have brought 44s. 8d. in 1861, 38s. 7d. in 1871, 32s. 2d. in 1881, and 24s. 9d. in 1891, brought only 20s. in 1897.

The trade between the colonies suffered also from the fall in values, but the volume was well maintained. The imports and exports, taken together, were :—

	£
1861	17,166,925
1871	29,745,068
1881	37,156,289
1891	60,114,797
1897	54,422,247

From the earliest days wool has been the great staple of Australasia. The wool clip is nearly all exported, and the total for each period was :—

	lb.
1861	84,636,800
1871	216,394,365
1881	378,738,600
1891	707,253,639
1897	625,411,345

Australasia is eminently a pastoral country. It contains nearly one-fourth of the sheep of the world, as well as more cattle and horses in proportion to the population than any other country, while the numbers of its flocks are still increasing :—

	Sheep.	Cattle.	Horses.	Swine.
1861.....	23,741,706	4,039,839	459,970	362,417
1871.....	49,773,584	4,713,820	782,558	737,477
1881.....	78,063,426	8,709,628	1,249,765	903,271
1891.....	124,547,937	11,861,330	1,785,835	1,154,553
1897.....	103,511,108	12,159,780	1,933,607	966,201

The total value of pastoral property, excluding land devoted to grazing, is £237,438,000, while the value of stock alone is £114,854,000. Australasia has long maintained with Europe a trade in preserved meats, but the more important industry of chilled or frozen meat was initiated in 1882. The value of meat products exported was:—

	£
1881.....	349,928
1891.....	1,725,322
1897.....	3,018,412

The description of the export was :—

	Chilled or Frozen.		
	Beef. cwt.	Mutton and Lamb. cwt.	Preserved Meats. lb.
1881.....	.....	9,980	18,817,200
1891.....	155,616	1,150,730	16,415,821
1897.....	618,186	1,809,167	37,147,240

Dairying for export is also an industry of recent establishment, and one which has the promise of a great future. The growth of the trade may be gauged from the following figures, showing the export of butter to the United Kingdom :—

	lb.
1881.....	815,841
1891.....	7,440,577
1894.....	34,297,627
1897.....	30,248,493

The area devoted to the plough has increased nearly sevenfold since 1861 :—

	Acres under crop.
1861.....	1,337,548
1871.....	2,683,204
1881.....	5,560,513
1891.....	6,790,462
1897.....	9,015,364

If to the land under crop be added that laid down under permanent artificially-sown grasses, the area would be more than doubled. The grass lands sown during the same years covered the following areas :—

	Acres.
1861	203,672
1871	922,811
1881	4,348,742
1891	8,112,485
1897	10,623,827

The principal crop is wheat, which covers more than half the area in cultivation, exclusive of sown grasses. The following figures, which include permanent grasses, relate to 1897–8 :—

	Acres.
Wheat for grain	4,673,754
Oats	750,683
Maize	345,236
Other Grain Crops	101,952
Potatoes	146,360
Vines	59,361
Hay	1,909,861
Other Crops	1,028,157
Permanent Grasses	10,623,827
Total	19,639,191

Though exporting in an average season not more than 9 million bushels of wheat, Australasia ranks sixth amongst the export countries of the world.

The present annual yield of the mines may be set down at £16,000,000, and the average for the last forty-six years has been somewhat over eleven millions sterling a year. From 1852 to 1897 there has been a total production of £519,238,840, thus made up :—

	£
Gold	399,381,186
Silver and Silver-lead	27,215,916
Copper	28,536,981
Tin	17,946,072
Coal	41,985,917
Other Minerals	4,172,768

The production at various periods was :—

	£
1871	11,543,000
1881	11,063,000
1891	13,450,690
1897	16,042,383

The value of the produce of the mines, fields, farms, forests, and workshops for 1896–7 averaged £26 14s. 9d. per head of total population. In previous years this figure has been greatly exceeded. The following are the total values of production for the years named :—

	£
1871	56,439,000
1881	87,606,000
1891	117,604,900
1896–7	114,460,000

The fall from 1891 to 1896–7 is due to a fall in prices, as the actual quantities produced have largely increased. Distributing the return for 1896–7 under the generally recognised branches of production, the value assignable to each was :—

	£
Agriculture	22,778,000
Pastoral Industries	35,150,000
Dairying, &c.	10,833,000
Mineral Production	13,844,000
Forests and Fisheries	3,034,000
Other Industries	28,821,000
Total	£114,460,000

Compared with the population, the primary production of Australasia is not exceeded, or even closely approached, by any other country ; and in regard to total value is surpassed only by the United Kingdom, France Germany, Austria, Russia, Italy, and Spain in Europe, and by the United States of America.

The revenue of the governments of the seven colonies exceeds £31,000,000, which is nearly one-third of that of Great Britain and Ireland, although the population of the colonies is hardly more than one-tenth. In Australasia, however, practically all the railways belong to the State, and the revenue from this source is about £11,000,000. The total public revenue was :—

	£
1861	6,186,440
1871	9,269,765
1881	20,512,233
1891	29,911,930
1897-8	31,272,588

The principal sources of revenue may be summarised as follows :—

	£
Taxation—Customs and Excise ...	8,967,386
Other.....	3,185,843
Railways and Tramways	10,675,300
Posts and Telegraphs.....	2,510,753
Public Lands	3,598,936
Other Revenue	2,334,370
Total	£31,272,588

The public debt of the colonies is very heavy, averaging over £52 per inhabitant; however, the greater part of it was incurred for the purpose of providing funds for the construction of railways and other revenue-yielding works. The following shows the use to which the borrowed money was put :—

	£
Railways	134,998,411
Water Supply and Sewerage	21,317,940
Telegraphs and Telephones	3,947,823
Other Works and Services	60,141,089
Total	£220,405,263

The annual interest and charges upon the public debt amount to £9,357,000, while the net revenue obtained from works constructed from loan funds is about £4,228,000, leaving a net liability of £5,129,000 per annum. The increase of Australasian indebtedness may be traced in the following figures :—

	£
1861	11,899,951
1871	39,040,871
1881	95,965,582
1891	193,962,687
1898	231,135,445

The deposits in ordinary banks and savings institutions now reach a total of £128,303,360, which, however, is somewhat smaller than in 1891, owing to losses and withdrawals consequent on the financial panic of May, 1893. The total deposits in all banks were :—

	£
1861	16,067,584
1871	28,833,761
1881	72,203,796
1891	138,402,730
1897–8	128,303,360

The increase over the whole period has been marvellous, and the accumulation of £29 per head is not equalled in any other country.

Australasia now boasts railways open to the extent of 14,587 miles, nearly all of which are the property of the State. The length of line just mentioned is equal to 1 mile to every 211 square miles of territory, and to every 304 inhabitants. Compared with population, Australasia is better served than even the United States, and equally served with the Dominion of Canada. The mileage open was :—

1861	243
1871	1,135
1881	5,526
1891	12,405
1898	14,587

Equally rapid has been the progress of telegraphic construction, but the following figures must be accepted as approximate only :—

1861	4,100
1871	12,800
1881	29,428
1891	44,855
1897	49,266

The number of messages received and despatched in 1897 was, in round numbers, 9,500,000, or 2·2 per inhabitant. In the United Kingdom the average is 2·1. No other country approaches these figures.

The facilities afforded by the Post Office are very largely availed of. About 216,000,000 letters and post-cards, 104,000,000 newspapers, and 45,000,000 packets are annually carried—figures which, when taken together and compared with the population, are largely in excess of those of any other country; but in the matter of letters alone Australasia is surpassed by the United Kingdom and the United States.

In regard to social condition, there has been a very material improvement in the population of these colonies. From 1861 to 1896 population increased between three and four-fold, while serious crime, as evidenced by convictions in the Superior Courts, has only increased one-fourth. The spread of education has been very marked. Out of

every 10,000 children between 5 and 15 years, there could read and write in :—

1861	4,637
1871	5,911
1881	7,058
1891	7,565

If the marriage registers be turned to, still more convincing testimony to the spread of education will be found. Out of 10,000 persons married, the illiterates were :—

1861	2,460
1871	1,349
1881	538
1891	220
1896	161

and even of the present small residuum of illiterates, the larger number were not born in Australasia.

The foregoing figures illustrate some of the phases of Australasian progress dealt with in this book. The general plan adopted in previous editions has been followed in the present issue. The reader's attention is directed to the appendix, which comprises a set of tables corresponding with the various sub-divisions of the work, and forming a synoptical view of the progress of each colony since 1861. In some cases these tables contain later particulars than it was found possible to embody in the text.

T. A. C.

Sydney, September 27, 1898.

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Map of Australasia ... ... Facing Title-page.

POLITICAL DIVISIONS.

THE first settlement in New South Wales, the oldest of the seven colonies of Australasia, was effected by an expedition under the command of Captain Arthur Phillip, who landed at Botany Bay on the 19th January, 1788, and formally took possession of the whole continent. Botany Bay being found unsuitable, the fleet was brought round to Port Jackson, and the city of Sydney founded on the 26th January of the same year. New South Wales was proclaimed a colony on the 7th of the following month, and its boundaries were defined as extending from Cape York, the northern extremity of Queensland, 10° 37′ south latitude, to South East Cape, the most southerly point of Tasmania, 43° 39′ south latitude, and from the 135th degree of east longitude to the east coast, including the adjacent islands. The boundaries thus defined include the whole of the territories now known as New South Wales, Queensland, Victoria, and Tasmania, and about half of the area of South Australia. Although the colony was originally a penal settlement, yet there was an influx of free immigrants from the first, and after the abolition of transportation in 1840 all traces of the penal element were rapidly lost. The Constitution Act of New South Wales was assented to on the 16th July, 1855, and proclaimed on the 24th November of the same year; and the first representative Parliament was opened on the 22nd May, 1856. The boundaries of the colony at the date of proclamation included that portion of the continent now known as Queensland, but did not take in Victoria, which had been made a separate colony in 1851.

Tasmania, formerly known as Van Diemen's Land, was colonised from New South Wales, and was intended to serve the purpose of a subsidiary penal settlement. Lieutenant Bowen, in charge of an expedition despatched from Sydney, took possession of the island on the 12th September, 1803, and formed a settlement on the east bank of the Derwent River, at Risdon; but the actual commencement of colonisation dates from February, 1804, when Lieutenant-Colonel Collins established himself at Sullivan's Cove, and laid the foundations of the present city of Hobart. The government was administered from Sydney until the year 1825, when, in

the month of December, Van Diemen's Land was duly constituted an independent province. In May, 1853, it was officially announced that transportation had ceased, and in the following year the name of the colony was changed from Van Diemen's Land to Tasmania. The Royal assent to the existing Constitution Act was proclaimed on the 24th October, 1855, and the first representative Parliament was opened on the 2nd December, 1856.

The foundation of the colony of Western Australia dates from the year 1826, when Major Lockyer landed at Albany in charge of an expedition from Sydney, consisting of a detachment of the 39th Regiment and a number of prisoners. In 1827 Captain Stirling arrived in H.M.S. Success, and explored the Swan River, with a view to establishing a permanent settlement on its banks; in June, 1829, Captain Fremantle landed near its mouth; and in the same year the town of Perth was founded. The Swan River Settlement, as it was known originally, was made a separate colony, under the name of Western Australia, on the 1st June, 1829, Captain Stirling being appointed the first Governor; and it remained a Crown colony under the direct control of the British Government until the 20th October, 1890. The present Constitution Act was assented to on the 15th August, 1890; it was proclaimed on the 21st October; and the first representative Parliament was opened on the 30th December in the same year.

The first attempt to settle Victoria was made in 1803. On the 7th October of that year Lieutenant-Colonel Collins arrived from England with the intention of founding in Port Phillip a convict settlement similar to that which had been established at Sydney. The expedition landed on the shores of Port Phillip, near Sorrento, and several explorations of the country were made, but in the course of a few months the attempt at colonisation was abandoned, as the place was believed to be unsuitable for settlement. For twenty years thereafter the District of Port Phillip continued to be neglected. In 1824 Hume and Hovell undertook an exploration of the territory to the south and west of the land then known to the settlers, reaching, it is believed, the western arm of Port Phillip, not far from the present town of Geelong. In 1826 another expedition, under Captain Wright, was sent from Sydney to form a settlement at Western Port, but returned by order of Governor Darling after one year's trial, although the reports of Hume and Hovell and of the officers of the military were favourable to a continuation of the occupation. The first permanent settlement was made in 1834, at Portland Bay, by Edward Henty. In May, 1835, John Batman arrived at Port Phillip from Launceston, Tasmania, and obtained from the aborigines tracts of land covering an area of 600,000 acres on the shores of Port Phillip and the banks of the Yarra, but these grants were afterwards disallowed by the Imperial Government. In August of the same year another party, under the leadership of J. P. Fawkner, also from Launceston, arrived in the Yarra, and formed a settlement on the site now occupied by the city of Melbourne. In 1836 Captain Lonsdale

was despatched from Sydney by Sir Richard Bourke, Governor of New South Wales. He bore the title of Resident Magistrate of the district of Port Phillip, and was accompanied by a party of soldiers and the civil officials necessary for the purpose of establishing regular government. In 1837 the Governor himself arrived from Sydney, and gave the name of Melbourne to the new settlement. Port Phillip was separated from the mother colony on the 1st July, 1851, and became an independent province under the name of Victoria. The Constitution Act was proclaimed on the 23rd November, 1855, and the first representative Parliament was opened on the 21st November, 1856.

South Australia was colonised in the year 1836, by immigrants who had arrived from England under the auspices of the South Australian Colonisation Company, and who, until a site for the settlement was chosen, remained at Kangaroo Island. Colonel Light, who was sent out to select a suitable spot for the first operations of the settlers, arrived in August, 1836, and after examining Nepean Bay, Port Lincoln, and Encounter Bay, decided upon establishing the capital where Adelaide now stands. Captain Hindmarsh, the first Governor, arrived at the close of the same year, and proclaimed the colony on the 28th December. At that date the western boundary was fixed at the 132nd meridian of east longitude, and the northern boundary at the 26th parallel of south latitude. The region between the 132nd meridian and the eastern boundary of Western Australia, viz., the 129th meridian of east longitude, although forming part of the territory legally belonging to New South Wales, was added to South Australia in 1861. The 26th parallel remained the limit of the colony until July, 1863, when the boundary was extended northward to the seaboard. The Act granting Responsible Government was proclaimed on the 24th October, 1856, and the first Parliament was opened on the 22nd April, 1857.

In 1831 a settlement was established by the Imperial Government at Port Essington, under Sir Gordon Bremer. It was principally used as a military post and as a harbour of refuge for distressed vessels, but after an occupation of nineteen years it was abandoned. In 1862 John M'Douall Stuart, a South Australian explorer, succeeded in crossing the continent from Adelaide to Adam Bay on the north coast. He represented the country as suitable for settlement, and application was accordingly made to the Imperial Government for permission to annex the whole of the territory lying between the 26° of south latitude and the seaboard, and the meridians of 129° and 138° east longitude. This tract of territory was formally granted to South Australia in July, 1863, and is now known as the Northern Territory of South Australia. In 1864 the first colonising expedition to the Northern Territory was despatched from Adelaide, a settlement being established at Escape Cliffs, Adam Bay; but as the locality was found unsuitable, the colonists, in 1870, removed to Port Darwin, which has since remained the official centre. The territory is represented in the South Australian Parliament,

and is administered by a Government Resident, who is directly responsible to the authorities at Adelaide.

The first attempt at colonisation in New Zealand was made in 1825, by an expedition under the command of Captain Herd, who bought two islands in the Hauraki Gulf and a strip of land at Hokianga; but the attempt failed, owing to the savage character of the natives. Subsequently, a settlement having grown up at what is now called Russell, in the Bay of Islands, in consequence of the frequent visits of whaling-vessels, Mr. Busby, in 1833, was appointed British Resident there. In 1839 the New Zealand Land Company, which had been promoted in England, despatched a preliminary expedition to New Zealand for the purpose of treating with the natives for the purchase of land. The members of this expedition arrived in September of the same year, and established themselves at Port Nicholson; and on the 21st January, 1840, the first body of immigrants arrived. Eight days later, Captain Hobson, R.N., arrived at the Bay of Islands, and on the following day the islands were placed under British rule, and became a dependency of New South Wales. On the 21st May of the same year the whole of the islands were declared to be under the sovereignty of Great Britain, and on the 3rd May, 1841, New Zealand was established a separate colony. Five immigrant-ships arrived in 1840, and settlements were made at Wellington and Auckland. By the treaty of Waitangi, which was signed on the 5th February, 1840, the native chiefs ceded the sovereignty of the islands to the British Crown. Disturbances, however, soon occurred between the Maoris and the white settlers, and for about a quarter of a century matters were in a more or less unsettled state. The chief events may be thus summarised:—The Wairau massacres occurred in June, 1843; rising headed by Honi Heki in July, 1844; rebellion of Wiremu Kingi in March, 1860; general war with the Maoris commenced in 1863; serious British reverses, including the Gate Pah disaster, in 1864; outbreak of the Hau-hau heresy in March, 1865; death of the chief, William Thompson, which practically closed the war, in 1867; rebellion under Te Kooti in November, 1868, which was not finally quelled until July, 1870; submission of the Maori King to the British Government in February, 1875. Constitutional Government was conferred on New Zealand in 1853, and a system by which the local governing power was vested in Provincial Councils, presided over by elective superintendents, continued until November, 1876, when it was abolished by an Act of the General Assembly, and Parliament took over the administration of all affairs other than those of a local character. The Constitution provides for two Houses of Legislature, as in the other Australasian colonies. The first session of the General Assembly was opened on the 27th May, 1854, but the members of the Executive were not responsible to Parliament. The first Ministers under a system of Responsible Government were appointed on the 18th April, 1856. In February, 1865, Wellington was established as the seat of government, and has remained so ever since.

Queensland, like Victoria, is an offshoot of New South Wales. In 1825 the first convict establishment was formed at Eagle Farm, in the Moreton Bay district. The penal settlement came to an end in the year 1842, and the district was proclaimed open to free settlement. From that date to December, 1859, the territory was under the control of the New South Wales Government, the local administration being entrusted to a Government Resident. Its separation from New South Wales took place in 1859, and its Constitution was proclaimed on the 10th December of that year. The first representative Parliament was opened on the 29th May, 1860.

AREAS AND BOUNDARIES.

THE Australasian colonies comprise the continent of Australia, the adjacent island of Tasmania, and the islands of New Zealand. The group is politically subdivided into seven colonies, which, with the area of each, are as follow :—

Colony.	Area in acres.	Area in square miles.
New South Wales	198,848,000	310,700
Victoria	56,245,760	87,884
Queensland	427,838,080	668,497
South Australia	578,361,600	903,690
Western Australia	624,588,800	975,920
Australia	1,885,882,240	2,946,691
Tasmania	16,778,000	26,215
New Zealand	66,861,440	104,471
Australasia	1,969,521,680	3,077,377

The British Empire, exclusive of territories under protectorates and spheres of influence, extends over an area of 9,093,865 square miles, so that more than one-third of its area lies within the limits of the seven colonies. Australasia is more than twenty-six times as large as the United Kingdom; more than fifteen times as large as France; more than half as large again as Russia in Europe; and almost equal in extent to the continent of Europe or to the United States of America.

The mainland of Australia lies between 10° 39′ and 39° 11½′ south latitude, and the meridians of 113° 5′ and 153° 16′ east longitude. Its greatest length is 2,400 miles from east to west, and its greatest breadth, 1,971 miles from north to south. Its area may be approximately stated at 2,946,691 square miles, and its coast-line at 8,850 miles, equal to 1 mile to each 333 square miles of land—the smallest proportion of coast shown by any of the continents. Tasmania, to the south of the mainland, is separated from Victoria by Bass Straits, about 150 miles wide. New Zealand is opposite the south-eastern coast of Australia, the width of ocean intervening, known as the Tasman Sea, being about 1,100 miles.

New South Wales lies principally between the 29th and 36th parallels of south latitude, and between the 141st and 153rd meridians of east longitude. The length of the colony, from Point Danger on the north to Cape Howe on the south, is 680 miles. From east to west, along the 29th parallel, the breadth is 760 miles; while diagonally, from the south-west corner—where the Murray passes into South Australia—to Point Danger, the length reaches 850 miles. The seaboard extends over 700 miles. There are no islands of importance on the coast of New South Wales. Lord Howe Island, some 400 miles north-east of Sydney, forms a portion of the colony. The Imperial Government handed over the administration of Norfolk Island to New South Wales in 1897, and in that year a Resident Magistrate was appointed as representative of the New South Wales Government.

Victoria is situated between the 34th and 39th parallels of south latitude, and the 141st and 150th meridians of east longitude. The dividing line between Victoria and South Australia was fixed as the 141st meridian of east longitude, but through an error in survey the present recognised boundary falls about $1\frac{1}{2}$ mile west of the 141st meridian. The mistake tells against South Australia, and the authorities of that colony have been demanding for many years a re-adjustment of territory, but there seems little prospect of the present arrangement being disturbed. The extreme length of Victoria from east to west is 420 miles, and the breadth 250 miles. The coast-line is about 600 miles.

Queensland extends from the 11th to the 29th parallel of south latitude, and from the 138th to the 153rd meridian of east longitude. The boundary line separating the colony from South Australia extends northwards along the 141st meridian of east longitude as far as the 26th parallel of south latitude, thence along the 138th meridian of east longitude to the seaboard. This line also requires re-adjustment, the present reputed boundary being in all probability too far eastward. The greatest length from north to south is 1,300 miles, and the greatest breadth is 800 miles. The coast-line is about 2,550 miles. The coast of Queensland in some parts is studded with islands. The largest are Stradbroke and Moreton on the south-east coast; while Thursday Island, on the far north coast, is an important place of call, and has been strongly fortified as one of the lines of defence for the colonies of the eastern seaboard.

The island of New Guinea lies close to the northern extremity of Queensland, being separated from the mainland by Torres Straits. It is occupied by Dutch, English, and German colonists. The British colony of New Guinea embraces all that group of islands lying within the 141st and 155th meridians of east longitude, and the 5th and 12th parallels of south latitude. The government is vested in an Administrator and an Executive Council; and towards the expenses of government the three colonies on the eastern seaboard of Australia contribute each £5,000 annually. By an Act passed in 1887 Queensland

engaged for ten years to hold itself primarily responsible for the whole amount of this subsidy. The area of British New Guinea is estimated to be 90,000 square miles, and the native population at 350,000.

South Australia extends from the 11th to the 38th parallel of south latitude, and from the 129th to the 141st meridian of east longitude. The province of South Australia, properly so called, lies between the 38th and 26th parallels of south latitude, and the 141st and 129th meridians of east longitude; the Northern Territory is bounded by the 26th and 11th parallels of south latitude, and the 129th and 138th meridians of east longitude. The greatest length of the colony from north to south is 1,850 miles, and the greatest width is 650 miles, with a seaboard of 2,000 miles, of which about 900 miles are washed by the Indian Ocean, the Arafura Sea, and the waters of the Gulf of Carpentaria. The most important islands belonging to the colony are Kangaroo Island on the south coast, 85 miles long and 30 broad; Melville Island, off Port Darwin, on the northern coast; Bathurst Island, separated from the last-mentioned by Apsley Straits; and Groote Eyland, in the Gulf of Carpentaria. A stockade was erected by Captain Bremer on Melville Island in 1824, but was abandoned in 1829.

Western Australia consists of the country between the 14th and 35th parallels of south latitude, and the 113th and 129th meridians of east longitude. The greatest length north and south is 1,450 miles, and the greatest width from east to west is 850 miles. The coast-line is about 3,000 miles.

Tasmania is an island situated about 150 miles south of Victoria, from which it is separated by Bass Straits. It lies between 40° 33′ and 43° 39′ south latitude, and the meridians of 144° 39′ and 148° 23′ east longitude. Its greatest length from north to south is 210 miles, and its greatest breadth from east to west is 200 miles. There are several small islands which belong to the colony. Flinders' Island, in Bass Straits, has an area of 513,000 acres; and King's Island, the chief of the north-west group, contains 272,000 acres. Including the adjacent islands, the area of Tasmania is 26,215 square miles.

New Zealand lies to the east of Australia, its nearest point to the mainland being Cape Maria van Diemen, which is about 1,100 miles from Sugarloaf Point, in New South Wales. New Zealand and its dependencies lie between the 33rd and 53rd parallels of south latitude, and between 166° 30′ east longitude and 173° west longitude. The waters known as the Tasman Sea separate the colony from the continent of Australia.

The North Island, or New Ulster, has a length of about 515 miles, by a breadth of about 250 miles. Its area is estimated at 44,467 square miles, and its coast-line at 2,200 miles. Wellington, the seat of Government, is at the southern extremity of this island. The South or, as it is officially called, the Middle Island or New Munster, has a length of about 525 miles by a breadth of about 180 miles. Its area is 58,525 square miles, and its coast-line measures 2,000 miles. Stewart

Island, or New Leinster, lies off the southern extremity of South Island, and has an area of 665 square miles; its greatest length is 30 miles by a breadth of 25 miles.

In 1887 a proclamation was made declaring the Kermadec Islands, lying between the 29th and 32nd parallels of south latitude, and the 177th and 180th meridians of west longitude, part of the colony of New Zealand. A protectorate is exercised by the Imperial Government over the Cook Islands or Hervey Group. The British Resident is appointed on the recommendation of the New Zealand Government, which also defrays the cost of administration.

Including the Chatham Islands, the Auckland Islands, the Campbell Islands, the Bounty Islands, and many others which are dependent, the total area of the colony of New Zealand is estimated at 104,471 square miles.

CLIMATE.

THE Tropic of Capricorn divides Australia into two parts. Of these, the northern or inter-tropical portion contains 1,145,000 square miles, comprising half of Queensland, the Northern Territory of South Australia, and the north-western divisions of Western Australia. The whole of New South Wales, Victoria, New Zealand, Tasmania, and South Australia proper, half of Queensland, and more than half of Western Australia, comprising 1,932,000 square miles, are without the tropics. In a region so extensive very great varieties of climate are naturally to be expected, but it may be stated as a general law that the climate of Australasia is milder than that of corresponding lands in the Northern Hemisphere. During July, which is the coldest month in southern latitudes, one half of Australasia has a mean temperature ranging from 40° to 64°, and the other half from 64° to 80°. The following are the areas subject to the various average temperatures during the month referred to :—

Temperature, Fahr.	Area in sq. miles.
35° — 40°	300
40° — 45°	39,700
45° — 50°	88,000
50° — 55°	617,800
55° — 60°	681,800
60° — 65°	834,400
65° — 70°	515,000
70° — 75°	275,900
75° — 80°	24,500

The temperature during December ranges from 50° to above 95° Fahr., half of Australasia having a mean temperature below 83°. Dividing the land into zones of average summer temperature, the following are the areas which would fall to each :—

Temperature, Fahr.	Area in sq. miles.
50° — 55°	300
55° — 60°	66,300
60° — 65°	111,300
65° — 70°	74,300
70° — 75°	362,300
75° — 80°	439,200
80° — 85°	733,600
85° — 90°	570,600
90° — 95°	584,100
95° and over.	135,400

Judging from the figures just given, it must be conceded that a considerable area of the continent is not adapted for colonisation by European

races. The region with a mean summer temperature in excess of 95° Fahr. is the interior of the Northern Territory of South Australia north of the 20th parallel; and the whole of the country, excepting the seaboard, lying between the meridians of 120° and 140° and north of the 25th parallel, has a mean temperature in excess of 90° Fahr.

Climatically, as well as geographically, New South Wales is divided into three marked divisions. The coastal region, which lies between the parallels of 28° and 37° south latitude, has an average summer temperature ranging from 78° in the north to 67° in the south, with a winter temperature of from 59° to 52°. Taking the district generally, the difference between the mean summer and mean winter temperature may be set down as averaging not more than 20°, a range smaller than is found in most other parts of the world. The famed resorts on the Mediterranean seaboard bear no comparison with the Pacific slopes of New South Wales, either for natural salubrity or for the comparative mildness of the summer and winter.

Sydney, situated as it is midway between the extreme points of the colony, in latitude 33° 51′ S., has a mean temperature of 62·9°, corresponding with that of Barcelona, the great maritime city of Spain, and of Toulon, in France; the former being in latitude 41° 22′ N., and the latter in 43° 7′ N. At Sydney the mean summer temperature is 71°, and that of winter 54°. The range is thus 17° Fahr. At Naples, where the mean temperature for the year is about the same as at Sydney, the summer temperature reaches a mean of 74·4°, and the mean of winter is 47·6°, with a range of 26·8°. Thus the summer is warmer, and the winter much colder, than at Sydney. The highest temperature in the shade experienced in Sydney was 108·5°, and the lowest winter temperature 35·9°, giving a range of 72·6°. At Naples the range has been as great as 81°, the winter minimum falling sometimes below the freezing-point. The mean temperature of Sydney for a long series of years was—spring 62°, summer 71°, autumn 64°, and winter 54°.

Passing from the coast to the tableland, a distinct climatic region is entered. Cooma, with a mean summer temperature of 65·4° and a mean winter temperature of 41·4°, may be taken as illustrative of the climate of the southern tableland, and Armidale of the northern. The first-named town stands in the centre of the Monaro plains, at an elevation of 2,637 feet above sea-level, and enjoys a summer as mild as either London or Paris, while its winters are far less severe. On the New England tableland, the climate of Armidale and other towns may be considered as nearly perfect as can be found. The yearly average temperature is scarcely 56·5°, while the summer only reaches 67·7°, and the winter falls to 44·4°, a range of temperature approximating closely to that of the famous health-resorts in the south of France.

The climatic conditions of the western districts of the colony are entirely different from those of the other two regions, and have often been cited as disagreeable. Compared with the equable temperature of the coastal district or of the tableland, there may appear some

justification for such a reputation, but only by comparison. The climate of the great plains, in spite of the heat of part of the summer, is very healthy. The town of Bourke may be taken as an example. Seated in the midst of the great plain of the interior, it illustrates peculiarly well the defects as well as the excellences of the climate of the whole region. Bourke has exactly the same latitude as Cairo, yet its mean summer temperature is 1·3° less, and its mean annual temperature 4° less than that of the Egyptian city. New Orleans also lies on the same parallel, but the American city is 4° hotter in summer. As regards winter temperature, Bourke leaves little to be desired. The mean winter reading of the thermometer is 54·7°, and accompanied as this is by clear skies and an absence of snow, the season is both refreshing and enjoyable.

The rainfall of New South Wales ranges from an annual average of 63·71 inches at Port Macquarie, on the northern coast, to about 12·5 inches in the Trans-Darling country. The coastal districts average about 41·98 inches of rain per annum; on the tableland the mean rainfall is 33·39 inches, but in the western interior it is as low as 17 inches. The average rainfall of Sydney for the thirty-eight years preceding 1897 was 49·85 inches, while in 1897 only 42·52 inches fell.

The climate of Victoria does not differ greatly from that of New South Wales; the heat, however, is generally less intense in summer and the cold greater in winter. Melbourne, which stands in latitude 37° 50′ S., has a mean temperature of 57·3°, and therefore corresponds with Bathurst in New South Wales, Washington in the United States, Madrid, Lisbon, and Messina. The difference between summer and winter is, however, less at Melbourne than at any of the places mentioned. The mean temperature is 6° less than that of Sydney and 7° less than that of Adelaide—the result of a long series of observations being:—spring, 57°; summer, 65·3°; autumn, 58·7°; winter, 49·2°. The highest recorded temperature in the shade at Melbourne was 110·7°, and the lowest, 27°.

Ballarat, the second city of Victoria, about 100 miles west from Melbourne, and situated at a height of about 1,400 feet above sea-level, has a minimum temperature of 29°, and a maximum of 104·5°, the average yearly mean being 54·1°. Bendigo, which is about 100 miles north of Melbourne, and 700 feet above the level of the sea, has a rather higher average temperature, ranging from a minimum of 31·2° to a maximum of 106·4°, the average yearly mean being 59·4°. At Wilson's Promontory, the most southerly point of Australia, the minimum heat is 38·6°, and the maximum 96·4°, the average yearly mean being 56·7°.

During the year 1897 the rainfall at Melbourne amounted to 25·85 inches, and for a long series of years it averaged 25·58 inches, with an average of 131 days during the year on which rain fell. At Bendigo, during 1896, 16·25 inches fell, and 33·34 at Portland. At Wilson's Promontory the rainfall was 43·24 inches.

As about one-half of the colony of Queensland lies within the tropics, it is but natural to expect that the climate should be very warm. The temperature, however, has a less daily range than that of other countries under the same isothermal lines. This circumstance is due to the sea-breezes, which blow with great regularity and temper what would otherwise be an excessive heat. The hot winds which prevail during the summer in some of the other colonies are unknown in Queensland. Of course, in a territory of such large extent there are many varieties of climate, and the heat is greater along the coast than on the elevated lands of the interior. In the northern parts of the colony the high temperature is very trying to persons of European descent.

The mean temperature at Brisbane, during December, January, and February, is about 76°, while during the months of June, July, and August it averages about 60°. Brisbane, however, is situated near the extreme southern end of the colony, and its average temperature is considerably less than that of many of the towns farther north. Thus the winter in Rockhampton averages nearly 65°, while the summer heat rises almost to 85°; and at Townsville and Normanton the average temperature is still higher.

The average rainfall of Queensland is high, especially along the northern coast, where it ranges from 60 to 70 inches per annum. At Brisbane 50·01 inches is the average of thirty-five years, and even on the plains of the interior from 20 to 30 inches usually fall every year. During 1897, 42·53 inches of rain fell in Brisbane, the number of wet days being 115.

South Australia, extending as it does over about 26 degrees of latitude, naturally presents considerable variations of climate. The southern portions have a climate greatly resembling that of the coast of Italy. The coldest months are June, July, and August, during which the temperature is very agreeable, averaging for a series of years 53·6°, 51·7°, and 54° for those months respectively. On the plains slight frosts occasionally occur, and ice is sometimes seen on the highlands. The summer is the only really disagreeable portion of the year. The sun at that season has great power, and the temperature frequently reaches 100° in the shade, with hot winds blowing from the interior. The weather on the whole is remarkably dry. At Adelaide there are on an average 120 rainy days per annum; during the last twenty-eight years the mean rainfall has been 20·40 inches per annum, while farther north the quantity recorded was considerably less. The country is naturally very healthful, and in evidence of this it may be mentioned that no great epidemic has ever visited the colony.

The climate of the Northern Territory of South Australia is extremely hot, except on the elevated table-lands. Altogether, the temperature of this part of the colony is very similar to that of Northern Queensland, and the climate is equally unfavourable to Europeans. It is a fact worthy of notice that the malarial fevers which are so troublesome to the pioneers of the northern parts of Australia almost, and in some cases

entirely, disappear after the land has been settled and consolidated by stock. The rainfall in the extreme north, especially in January and February, is exceedingly heavy. The average yearly rainfall in the coast districts is about 63 inches.

Western Australia has practically only two seasons—the winter, or wet season, which commences in April and ends in October; and the summer, or dry season, which comprises the remainder of the year. During the wet season frequent and heavy rains fall, and thunderstorms with sharp showers occur in the summer. The extremes of drought and flood experienced in the other colonies are almost unknown in Western Australia, but during the summer months the north-west coast is sometimes visited by hurricanes of great violence. In the southern and early-settled parts of the colony the mean temperature is about 64°; but in the more northern portions the heat is excessive, though the dryness of the atmosphere makes it preferable to most tropical climates. At Perth, in 1897, the mean temperature was 63·7°, the maximum being 107° and the minimum 37·5°; and the rainfall for the same year was 27·17 inches, rain having fallen on 106 days. Although the heat is very great during three months of the year, the nights and mornings are almost always cool, and there being so little moisture in the air no danger arises from camping out.

Tasmania, protected as it is by its geographical position and by the tempering influence of the surrounding ocean from extremes of heat of cold, enjoys an exceedingly genial climate. The greater part of the island in the settled regions is characterised by a mild and equable temperature, ranging between the extremes of 20° to 44° in winter and 78° to 96° in summer. Spring and autumn are the most pleasant seasons of the year, especially the latter, when the mean reading of the thermometer is about 57°. The mean temperature of Hobart for the last fifty years has been 55°. The richness of its flora is an evidence of the genial nature of the climate of the colony, while the purity of its atmosphere is proved by the small proportion of zymotic diseases recorded in the bills of mortality. The hot winds of the continent of Australia are felt in the northern parts of the island only, and even there they are greatly reduced in temperature by their passage across Bass Straits. Generally speaking, all through the summer months there are alternate land and sea breezes which tend to cool the atmosphere even in the hottest days. The climate is fresh and invigorating, and is much recommended as a restorative for those whose constitutions have been enfeebled by residence in hotter climes. Large numbers of tourists in search of health visit the island every summer. The rainfall, except in the mountain districts, is moderate and regular. The average downfall at Hobart for a long series of years was 22·93 inches, with 143 wet days per annum.

The climate of New Zealand is in some respects similar to that of Tasmania, but the changes of weather and temperature are often very sudden. As the colony extends over more than 10 degrees of latitude, its climate is very varied. That of the North Island is somewhat similar

to the climate of Rome, Montpellier, and Milan; while the Middle or Southern Island more resembles Jersey, in the Channel Islands. The mean annual temperature of the North Island is 57°, and of the Middle Island 52°, while the yearly average of the whole colony for each season is as follows:—Spring, 55°; summer, 63°; autumn, 57°; and winter, 48°. The mean temperature of New Zealand is lower than that of similar latitudes in Europe, though higher than is experienced in America on corresponding parallels. The mean temperature of the South or Middle Island is less by about 5° than that of the North Island. Snow very seldom lies on the ground at the sea-level in the North Island, and only occasionally in the South Island. The summits of Ruapehu, the highest mountain in the North Island, and of the great mountain chain in the South Island, are covered with perpetual snow from an altitude of 7,500 feet above the level of the sea. Ice is occasionally seen in winter-time in all parts of New Zealand. The whole colony is subject to strong breezes, which frequently culminate in gales. The rainfall during 1897 varied very much at the several observing stations. At Auckland it amounted to 45·36 inches, while at Wellington it reached as high as 48·89 inches. At Maheno, on the east coast of the Middle Island, only 11·35 inches fell; at Dunedin, on the same coast, but more to the south, there was a fall of 38·07 inches; at Hokitika, on the west coast of the South Island, a rainfall of no less than 129·83 inches was recorded; while at Puysegur Point, on the same coast, a total of 258·60 inches was reached. Periods of lasting drought are almost unknown in the colony; indeed, it is very seldom that the records of any station show the lapse of a whole month without rain. The number of days in the year on which rain fell varied from 59 at Cape Campbell to 270 at Puysegur Point.

The following table illustrates the rainfall of Australasia:—

Rainfall.	Rainfall area in square miles.			
	Australia.	Tasmania.	New Zealand.	Australasia.
Under 10 inches ...	1,219,600	.....	.....	1,219,600
10 to 20 „ ...	843,100	9,440	.....	852,540
20 to 30 „ ...	399,900	.....	69,650	469,550
30 to 40 „ ...	225,700	8,380	17,410	251,490
40 to 50 „ ...	140,300	8,380	17,410	166,090
50 to 60 „ ...	47,900	.....	.....	47,900
60 to 70 „ ...	56,100	.....	....	56,100
Above 70 „ ...	14,100	.....	.....	14,100
Total.....	2,946,700	26,200	104,470	3,077,370

1 39.71
2 42.93
3 13.55
4 3.38
5 .46
100.07

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PARLIAMENTS.

FROM the nature and composition of the population of Australia at and for some time after its first settlement, the government and direction of affairs naturally rested in the hands of the Governor alone, and it was not until the year 1824, during the time of Sir Thomas Brisbane, that any attempt was made to provide the Governor with recognised advisers. In that year the first Legislative Council was appointed, consisting of six gentlemen, of whom five held the principal official positions in the colony, the sixth being Mr. John Macarthur, the founder of the Australian wool industry. The first Act of Parliament ever passed in Australia was a measure dealing with the currency, in 1824. Four more members were added to the Council in the following year, by Governor Darling, and further additions were made from time to time. On the 6th June, 1838, the public were first admitted to hear the debates, for up to that time even the representatives of the Press had been excluded. Thenceforth the proceedings were more or less fully reported.

Until 1843 the members of the Legislative Council were all nominated by the Governor, but in that year the principle of election was introduced, in conjunction with that of nomination. The nominated members were twelve in number, six being official and six non-official. The elected members comprised a number of men whose names have become historic, such as W. C. Wentworth, William Bland, William Lawson, Charles Cowper, Terence Aubrey Murray, W. H. Suttor, Francis Lord, Richard Windeyer, Alexander Macleay, Roger Therry, Charles Nicholson, and John Dunmore Lang, the two last mentioned being among the representatives of the Port Phillip district, now known as Victoria. Mr. Alexander Macleay was the first Speaker of this body, succeeded by Sir Charles Nicholson in 1846.

Partial representation in the Legislature did not altogether satisfy the colonists, for as far back as the year 1845 the question of Responsible Government was publicly discussed. The agitation once awakened was never allowed to slumber, and aided by a vigorous and outspoken Press, as well as by the talented oratory of some of the patriotic members of the Legislature, it continually became more active until in the year 1855 the Imperial Parliament passed a measure to sanction the new Constitution that the colonists sought. On the 22nd May, 1856, the first Australian Parliament under Responsible Government was opened by Sir William Denison in Sydney. It consisted of a nominated Upper House, called the Legislative Council, the number of members of which

was not definitely fixed; and a Legislative Assembly, consisting of fifty-four elected members, of whom Sir Daniel Cooper was chosen the first Speaker. The first Ministry consisted of Sir Stuart Alexander Donaldson, as Colonial Secretary and Premier; Mr. Thomas Holt, Colonial Treasurer; Sir William Manning, Attorney-General; Mr. J. B. Darvall, Solicitor-General; Mr. G. R. Nichols, Auditor-General; and Mr. W. C. Mayne as Representative of the Government in the Legislative Council. From that period the principles upon which the government of New South Wales is based have never altered, though there have been some changes in the details. Various amendments of the Electoral Act have taken place from time to time, by which the number of representatives to the Legislative Assembly has been largely increased, and alterations have taken place in the direction of the removal of restrictions, and the extension of the liberties of the people. The Legislative Council now numbers fifty-eight members, and the tenure of a seat in that body is for life. The only qualification required of members is that they shall be 21 years of age, and natural-born or naturalised subjects. The qualification for a member of the Assembly is the holding of an elector's right. Members of the Lower House receive a remuneration of £300 a year, but members of the Council are unpaid. Free passes by rail and tram are received by members of both Houses.

A new Electoral Act, assented to on the 13th June, 1893, remodelled the whole electoral system of New South Wales. The number of members of the Assembly is fixed at 125, and the colony is divided into 125 electoral districts. No elector can have more than one vote, or, in other words, the "one man one vote" principle is enforced. Every person entitled to vote must see that his name is inscribed on the electoral roll and must provide himself with a document called an "elector's right," without the production of which he cannot demand a ballot-paper. The suffrage is manhood, the only conditions being twelve months' residence in the colony in the case of an immigrant, and three months' residence in the electoral district in which the right to vote is claimed. In the case of removal from one district to another, the qualifying residential period is reduced to one month, and the elector may vote in his old district until he has acquired the month's residential qualification in the district to which he has removed. In 1896 the franchise was extended to the police force. The duration of Parliament is limited to three years. There have been seventeen Parliaments in New South Wales, the average existence of which has been two years three months and five days. At the general election for the eighteenth Parliament, which took place on the 27th July, 1898, there were 324,338 electors on the roll, 316,819 of whom were in 122 contested constituencies. Of the latter, 178,717 exercised their right to vote, forming only 56·41 per cent. of the electors enrolled. It must be pointed out, however, that the number of names enrolled is largely in excess of the number of electors entitled to vote, and that the true proportion would be about 64·75 per cent.

The example of New South Wales was not without effect on the other Australasian colonies. Victoria, after its separation from New South Wales, was legislated for by a Council, some of the members of which were nominated and others elected; but on the 21st November, 1856, the first Parliament under the new Constitution of the colony was opened. This Constitution differed from that of the parent colony in that the Legislative Council as well as the Assembly was elective; it consisted of thirty members, while there were fifty-eight in the Lower House. Mr. W. C. Haines was the first Premier. There are now forty-eight members in the Council, and ninety-five in the Assembly. Members of the Upper House must be of the full age of 30 years, and for one year previous to the election have possessed a freehold estate of the value of £100 per annum, free of encumbrance. The tenure of office is six years, and there is no remuneration attached to the position. Electors must possess a £10 freehold or a leasehold of £25, or be mortgagors in possession of property rated at not less than £10 per year. Graduates of British or Colonial Universities, legal and medical practitioners, clergymen, certified school-masters, military and naval officers, and matriculated students of the Melbourne University are entitled to the franchise. Members of the Assembly must be 21 years of age, natural-born or naturalised subjects, and have been resident in the colony for two years. The reimbursement is £300 per annum, with a free railway pass. Three years is the limit of the duration of a Parliament. The suffrage is practically manhood, with residence in the colony of twelve months' duration. There have been sixteen complete Parliaments in Victoria under the present Constitution, the average duration of each being two years and five months. The general election for the seventeenth Parliament took place in October, 1897. There were at that time 254,125 electors enrolled, of whom 225,000 were in eighty-two contested constituencies. Of these, 158,225, or 70·32 per cent., voted.

Tasmania, on its separation from New South Wales at the end of 1825, was provided with a nominated Legislative Council, under which it was governed for some thirty years. Following the lead of their neighbours, the colonists of this island also agitated for a Constitution, which was eventually granted to them, and came into force on the 2nd December, 1856. Tasmania now possesses a Legislative Council and a Legislative Assembly, both of which are elective. The Council consists of eighteen members, who hold their seats for six years, three members, or one-sixth of the whole number, retiring every year. In the case of *ad interim* elections, the incoming member holds his seat only as long as his predecessor would have held it. Members must be 30 years of age, and natural-born or naturalised subjects. Judges of the Supreme Court, placemen (except Ministers of the Crown), and Government contractors are disqualified from sitting in either Upper or Lower House. Members of both Houses receive a reimbursement of expenses, which was originally fixed at £100 per annum, but has since been reduced to £50. Electors

for the Council must possess a property qualification of £20 per annum freehold or £80 leasehold, beside which there are professional and educational qualifications, coupled with a condition of residence. There are thirty-seven members of the House of Assembly, who must be 21 years of age and natural-born or naturalised subjects. The duration of the Assembly is now limited to three years. Adult males are qualified to be electors if their names are on the assessment roll of the district as owners or occupiers of any property ; or if they are in receipt of income, salary, or wages to the amount of £60 per annum, and have resided in the district for twelve months, rations and house allowance being included in computing wages. The eleventh Parliament expired by effluxion of time in December, 1896. The actual term of existence of Tasmanian Parliaments has averaged three years five months and sixteen days. At the general election for the twelfth Parliament, which took place early in 1897, there were about 30,300 electors on the roll. Of these, 19,850 were in fifteen contested constituencies. The number who voted was 11,950, or 57·68 per cent.

South Australia, like most of the other Australian colonies, was at first subject to the nominee system of appointment to the Legislative Council but in 1848 it obtained the boon of adding elected members to those nominated. Constitutional Government was granted to the colony in 1856, and the first Parliament under the new order of things assembled on the 22nd April in the following year. The South Australian Legislature consists of a Legislative Council of twenty-four members and a House of Assembly of fifty-four. Both Houses are elected by the people. Eight members of the Council retire every three years, but are eligible for re-election. Members are not required to have a property qualification, but they must have resided in the province for three years, and be not less than 30 years of age. An elector must have a freehold of £50 or a leasehold of £20 annual value, or be an occupier of a dwelling of the clear annual value of £25; and he must have been registered six months prior to the election. The principle of "one man one vote" has long been in existence in South Australia; and for some time there has been in force a provision by which absent electors may, under certain restrictions, record their votes. Members of the Assembly, as well as electors, are qualified by being 21 years of age, and having been enrolled for six months before the election. Female suffrage was granted in 1895, and women voted for the first time at the general election held on the 25th April, 1896. Members of each House receive £200 per annum. The duration of a Parliament is limited to three years. There have been fourteen complete Parliaments, with an average duration of two years four months and twenty-one days. At the general election for the fifteenth Parliament, which took place in April, 1896, all the electorates in the colony were contested. The number of enrolled voters was 137,781, and of these 91,348, or 66·30 per cent., voted.

Queensland, which formed part of New South Wales until the end of the year 1859, was never under the nominee system as a separate colony,

but commenced with Responsible Government, under which its first Parliament was opened on the 29th May, 1860. Its Legislative Council consists of members nominated by the Governor. There are forty at present, but no limit is fixed to the number. The tenure is for life. The qualification for members is that they must be 21 years of age, and natural-born or naturalised subjects. They receive no remuneration. The Legislative Assembly, of which there are seventy-two members, is elected by the people. Electors are enrolled under what is practically manhood suffrage, the only condition being six months' residence. Persons who possess freehold property of the value of £100 or house property of an annual value of £10, or who hold property on lease at an annual rent of £10, or a pastoral lease or license from the Crown, are entitled to vote in every district within which such property may be. Any person on the electoral roll is qualified to be a member of the Assembly. The duration of Parliament is limited to three years, and members of the Assembly receive £150 a year, with a free railway pass, and travelling expenses in the case of those members who are not in receipt of official salary. There have been eleven complete Parliaments, the average duration of which has been three years and six days. The general election for the twelfth Parliament took place in March and April, 1896. Six out of seventy-two seats were not contested. The total number of electors enrolled at the time was 86,882, of whom 79,971 were in contested electorates, and of these 62,363, or 77·98 per cent., voted.

In New Zealand, as in the other colonies, the form of government in the early days was of a mixed description, but in the year 1852 an Act was passed by the Imperial Parliament conferring upon the colony a Constitution. New Zealand was divided into six provinces, which were subsequently increased to nine, each governed by a Superintendent and a Provincial Council elected on a franchise which was practically equivalent to household suffrage. The provincial system, however, did not give satisfaction, and was abolished in 1876, when a system of Parliamentary Government for the whole of the colony came into existence. The Legislature now consists of two branches. There is a Legislative Council of forty-four nominees. Prior to 1891 the members held their seats for life, but in that year an Act was passed under which all new appointments to the Council are made for seven years only, though members are eligible for re-appointment. The honorarium is £150 per annum, with a deduction of £1 5s. per sitting in case of absence exceeding five sittings in one session, except from illness or some other unavoidable cause. The qualification for membership is that the person must be 21 years of age, and a natural-born or naturalised British subject. One-fourth of the total number of members is required to form a quorum. The House of Representatives consists of seventy-four members, of whom four are Maoris, elected to represent the natives. The qualification for membership is simply registration as an elector. Persons of either sex who are not less than 21 years of age are entitled

to vote, provided they have resided in the colony for one year, and in the electoral district for three months prior to registration, or hold freehold estate of the value of £25, and have held such for six months. Maoris are entitled to be placed on the European roll if they possess the latter qualification; if not, they are entitled to vote in one of the four native electorates, provided they are of age and reside therein. The principle of "one man one vote" has been in existence in the colony for a number of years. The honorarium of a member of the House of Representatives is £240 per annum, with travelling expenses to and from Wellington; and a deduction of £2 per sitting is made for all absences from the House exceeding five days per session, unless due to sickness or other unavoidable cause. The duration of a Parliament is three years. Twenty members are required to form a quorum. There have been twelve complete Parliaments since constitutional government was conferred upon the colony, their average duration being three years one month and twenty-five days. At the general election for the thirteenth Parliament, which took place on the 4th December, 1896, all the constituencies were contested. In the seventy European electorates there were 339,230 electors on the rolls, of whom 258,254, or 76·01 per cent., exercised the franchise. In the four Maori electorates a total of 13,008 votes was recorded.

Western Australia, which was proclaimed a British colony on the 1st June, 1829, was the last of the group to enjoy the privilege of Responsible Government. At an early stage of its existence the colony possessed a Legislative Council, consisting exclusively of officials nominated by the Governor. Subsequently, elected members were added, representing the principal districts of the colony, and this state of things continued until the end of 1890, when the new Constitution came into existence. Under it two Houses of Legislature were established, the Upper House consisting of fifteen nominated members, and the Lower House of thirty members, representing the thirty electorates into which the colony was divided. An amended Constitution Act, however, came into force in 1893, when the total population of the colony was found to exceed 60,000 persons. Under this Act the Legislative Council was increased to twenty-one, and the Legislative Assembly to thirty-three members. A further amending Act came into force in 1896, under the provisions of which the Legislative Council consists of twenty-four members, elected for six years; and the Legislative Assembly, of forty-four members, elected for four years. A member of the Legislative Council must be 30 years of age and free from legal incapacity, and must have resided in the colony for at least two years. A member of the Legislative Assembly must be 21 years of age and free from legal incapacity, and must have resided in the colony for at least twelve months. Members of both Houses must either be natural-born subjects of the Queen, or have been naturalised five years, with residence in the colony for the full period of five years in the case of a member of the Council, and for two years in the case of a member of the Assembly.

An elector for the Upper House must have resided in the colony for twelve months, and for that time have held a freehold estate of the clear value of £100, or have been a householder occupying a dwelling of the annual value of £25 for the same period; or he must occupy a leasehold estate of the annual value of £25, with eighteen months of the lease to run, or have held a similar leasehold for the past eighteen months, or be a holder of a Crown lease or license of an annual value of not less than £10; or he must be on the electoral roll of a Municipality or Roads Board district in respect of property of not less than £25 annual value. To qualify a person as an elector for the Assembly, he must either have resided in the colony for one year, and in the district for which he makes his claim for six months, or for that time have held a freehold estate of not less than £50, or a house of an annual value of not less than £10, or a leasehold estate of similar value, or a pastoral or running lease of not less than £5 per annum, or be inscribed on the roll of a Municipal or Roads Board district within the electorate. Members of the Legislature are not paid for their services, but they travel free over the railway lines of the colony. The first Premier was the Hon. Sir John Forrest, K.C.M.G. There was one Parliament under the constitution of 1890; and there has been one under the constitution of 1893. Their average duration has been two years seven months and twelve days. The third Parliament was elected in April and May, 1897, when the total number of electors on the roll was 23,318. Contests took place for only twenty-six out of forty-four seats, the number of electors in the contested constituencies being 17,114, of whom 9,016, or 52·69 per cent., exercised their right to vote.

The following table shows the number of members of each of the Houses of Parliament in the various colonies, with the remuneration which they receive in consideration of their services :—

Colony.	Legislative Council.		Legislative Assembly.	
	No. of members.	Remuneration.	No. of members.	Remuneration.
New South Wales	58	None	125	£300 per ann.
Victoria	48	None	95	£300 ,,
Queensland	40	None	72	£150 ,,
South Australia	24	£200 per ann.	54	£200 ,,
Western Australia	24	None	44	None.
Tasmania	18	£50 per ann.	37	£50 per ann.
New Zealand	44	£150 per ann.	74	£240 ,,

Federation.

The federation of the Australian colonies having at length been brought so near to accomplishment, this chapter would be incomplete without a brief history of the movement. The question did not escape

the attention of those who drew up the outlines of the first free Constitution for Australia; for, indeed, they sketched out a fairly comprehensive federation scheme. Unfortunately, however, the proposition was mixed up with others that were unpopular, and was allowed to sink out of sight with them. Still, from time to time the evil of want of union among the Australian colonies was made forcibly apparent, and the idea of federation gradually became more and more popular. Discussions of the subject took place in the Australian press, and conferences were held, the result of which was that the question came before the Imperial Parliament, which passed a measure permitting the formation of a Federal Council, to which any colony that felt inclined to do so could send delegates. The first meeting of the Federal Council was held at Hobart in January, 1886, the colonies of Victoria, Queensland, Tasmania, Western Australia, and Fiji being represented. New South Wales, South Australia, and New Zealand declined to join, but South Australia sent delegates to a subsequent meeting. The Council held seven meetings, at which various matters of intercolonial interest were discussed. It was, however, a purely deliberative body, and possessed neither funds nor powers to put its legislation into force. The Council is still in existence.

A more important step towards the federation of the Australasian colonies was taken in February, 1890, when a Conference, consisting of delegates from each of the seven colonies, was held at Parliament House, Melbourne. The members held seven meetings, the result being the adoption of an Address to the Queen, submitting certain resolutions which affirmed the desirableness of an early union under the Crown of the Australian colonies on principles just to all; suggested that the remoter Australasian colonies should be entitled to admission to the union upon terms to be afterwards agreed upon; and recommended that steps should be taken toward the appointment of delegates to a National Australasian Convention, to consider and report upon an adequate scheme for a Federal Constitution.

In accordance with these resolutions, delegates were appointed by the different Australasian Parliaments, and on the 2nd March, 1891, the National Australasian Convention commenced its sittings in the Legislative Assembly Chambers, Macquarie-street, Sydney. There were forty-five members of the Convention altogether, each colony sending seven, with the exception of New Zealand, which had only three representatives. Sir Henry Parkes was unanimously chosen as President, and Sir Samuel Griffith as Vice-President. Resolutions were adopted affirming the following principles:—

1. The powers and rights of existing colonies to remain intact, except as regards such powers as it might be necessary to hand over to the Federal Government.
2. No alteration to be made in State boundaries without the consent of the Legislatures of such States, as well as of the Federal Parliament.

3. Trade between the federated colonies to be absolutely free.
4. Power to impose Customs and Excise Duties to rest with the Federal Government and Parliament.
5. Military and Naval Defence Forces to be under one command.
6. The Federal Constitution to make provision to enable each State to make amendments in its constitution if necessary for the purposes of Federation.

Further resolutions approved of the framing of a Federal Constitution which should establish a Senate and a House of Representatives—the latter to possess the sole power of originating money bills; also a Federal Supreme Court of Appeal, and an Executive consisting of a Governor-General and such persons as might be appointed as his advisers. A draft Constitution Bill was adopted by the Convention, but no steps were taken by any of the colonies towards the adoption or rejection of the scheme.

Another scheme, and one which promises a more speedy realisation of the hopes of federationists, because based on the popular suffrage, was formulated at a Conference of the Premiers of the Australasian colonies, summoned by the Premier of New South Wales, Mr. G. H. Reid. At this Conference, which was held at Hobart in the opening months of the year 1895, the five Australian colonies and the colony of Tasmania were represented. It was decided to ask the Parliament of each colony to pass an Enabling Bill permitting the election of ten persons to represent the colony on a Federal Convention. The duties of this Convention, it was determined, should be the framing of a Federal Constitution, to be submitted, in the first instance, to the local Parliaments for suggested amendments, and, after final adoption by the Convention, to the electors of the various colonies for their approval by means of the referendum. In accordance with these resolutions, Enabling Acts were passed by the Parliaments of New South Wales, Victoria, South Australia, Western Australia, and Tasmania—Queensland holding aloof from the movement after several attempts to agree on the question of the representation of the colony; and delegates to the Convention were elected by the popular vote in New South Wales, Victoria, South Australia, and Tasmania, and by the Parliament of Western Australia.

The first session of the Federal Convention was opened in Adelaide on the 22nd March, 1897, Mr. C. C. Kingston, Premier of South Australia, being elected President; and Sir Richard Baker, President of the Legislative Council of South Australia, Chairman of Committees; while Mr. Edmund Barton, Q.C., one of the representatives of the mother colony, and a gentleman who had taken a deep interest in the movement, acted as Leader of the Convention. The Convention did not formally adopt the 1891 Bill as the basis of its work, but followed the general arrangement of that Bill, and accepted many of its provisions. The final meeting of the session was held on the 23rd April, when a draft

Constitution was adopted, and at a formal meeting on the 5th May the Convention adjourned until the 2nd September, having decided to hold its second session in Sydney. During the four months which intervened the Bill was considered by the Parliaments of the various colonies, and numerous amendments were recommended. These were considered at the second session of the Convention in Sydney, which extended from the 2nd to the 24th September, 1897, when, in order to meet the convenience of some of the delegates, a further adjournment was made, under the terms of which the Convention met for a third and final session in Melbourne on the 20th January, 1898. During this session the remainder of the proposed amendments were discussed, and the Draft Bill was finally adopted on the 16th March, for submission to the people of the colonies by means of the referendum.

This Draft Bill provides for the federation of the colonies under the Crown, with the designation of the Commonwealth of Australia. The executive power is vested in a Governor-General—to be appointed by the Queen—assisted by a Federal Executive Council; and it is provided that the seat of government shall be established in federal territory. The Parliament is to consist of two Houses—the Senate and the House of Representatives—both to be elected by the people on the franchise existing in the various States for the popular body at the time of union—the Senate for a period of six years, and the House of Representatives for a period of three years. Every State joining the Federation at its inception is entitled to an equal representation of six members in the Senate; and it is provided that half the number of Senators shall retire every three years, but shall be eligible for re-election. The number of members of the House of Representatives is to be, as near as possible, twice the number of Senators, the States to be represented in proportion to population, and it is provided that no State entering the Federation at the time of its establishment shall have a smaller representation than five members. Although the Federal Parliament will have power to alter the franchise on which its members will be elected, yet it can only do so in the direction of the extension of the voting powers of the people, so that in New Zealand and South Australia the right of women to vote cannot be withdrawn by the central authority so long as adult suffrage prevails in those States. Both Senators and Representatives are to receive an annual payment of £400 each.

It is proposed that immediately on the establishment of the Commonwealth the Federal Government shall assume the administration of the departments of Customs and Excise, and, on dates to be afterwards proclaimed, shall also take over from the States, Posts and Telegraphs; Naval and Military Defence; Light-houses, Lightships, Beacons and Buoys, and Quarantine; and shall have exclusive powers of dealing with these services. Power is also given to the Federal authority to deal with a large number of other matters of government, but only the services specified are to be transferred without further legislation. In the event of the Federal law conflicting with an existing State law, it

is enacted that the Federal law shall prevail. Within two years of the establishment of the Commonwealth a uniform Customs and Excise tariff is to be imposed by the Federal Government, and intercolonial trade will then become absolutely free. As the transfer of the services specified will leave the Federating States with a large deficiency in their local finances, a provision has been inserted in the Constitution making it incumbent upon the Commonwealth to raise from Customs and Excise duties four times the sum actually needed by the Commonwealth for its own purposes in the exercise of the original powers conferred, and to return the excess to the local Treasuries. Other sources of taxation are left open to the Federal Government, so that the Federal Treasurer is not absolutely compelled to raise the whole of his requirements through the Custom House. For the first five years after the imposition of the uniform tariff the surplus revenue raised will be returnable to the colonies in the actual proportions in which it was contributed by them, and thereafter in such manner as the Federal Parliament may deem fair. To meet the special circumstances of Western Australia, so largely dependent upon its Customs revenue, that colony will be allowed to retain its intercolonial duties, in gradually diminishing proportion, for the first five years of the uniform tariff. With the consent of the States, the railway systems of the colonies may be taken over by the Federal authority; and the Commonwealth is also empowered to take over the whole or a portion of the State Debts, applying the surplus revenue collected from Customs and Excise in payment of the interest thereon. An Inter-State Commission is to be established for the proper administration of the Federal laws relating to trade and commerce between the States of the Union. The Federal Parliament will have power to forbid the imposition of preferential or discriminating railway tariffs by the federating States should such tariffs be unjust to other States of the Union, due regard being paid to the financial obligations resting upon the States by whom the railways were constructed. The right to a reasonable use of the waters of a river for the purposes of irrigation or conservation will be reserved to the people of the colony through which that river flows.

The Senate and the House of Representatives will have equally the power of originating Bills, with the exception of Bills appropriating revenue or imposing taxation, the right of originating which is reserved to the House of Representatives. The Senate will not have the power of amending these appropriation or taxation Bills, but it may return them to the House of Representatives suggesting the omission or amendment of any of their provisions, and the House of Representatives may deal with such suggestions as it pleases. In the case of Bills, other than taxation or appropriation Bills, which have been passed twice by the House of Representatives, and have been twice rejected or shelved by the Senate, it is provided that the two Houses may be simultaneously dissolved, and if, after the election, they should still disagree, the members of the two Houses will require to meet at a joint sitting, and the Bill can only

become law if adopted by a majority of three-fifths of the members present and voting at the joint sitting.

The judicial power of the Commonwealth is vested in a High Court of Australia. This Court may hear appeals from all federal Courts or Courts having federal jurisdiction, from the Supreme Courts of the States, and from the Inter-State Commission. Appeals to the Privy Council in matters involving the interpretation of the Federal Constitution or of the Constitution of a State are forbidden; but the right of appeal to the Privy Council in other cases is not withdrawn, although the Federal Parliament may make laws limiting the matters in which such appeals may be made. The Federal Constitution can only be amended by an absolute majority of the members of each House of Parliament. It is provided that the amendment shall then be submitted to the people by means of the referendum, and shall become law only if accepted, first, by a majority of the people of the Commonwealth, and, second, by a majority of the States.

In the month of June, 1898, the Constitution Bill was submitted by means of the referendum to the people of New South Wales, Victoria, South Australia, and Tasmania. The Enabling Acts provided that in the case of New South Wales the minimum affirmative vote should be 80,000; in the case of Victoria, 50,000; and in the case of Tasmania, 6,000; while in South Australia a bare majority of votes was sufficient to secure the acceptance of the Bill. In Victoria, South Australia, and Tasmania the Bill was adopted by large majorities; while in the case of New South Wales there was a majority of 5,367 for the Bill, but as the affirmative vote only reached 71,595, the Bill was regarded as rejected. The results of the voting were as follow :—

Colony.	For the Bill.	Against the Bill.	Total Votes, excluding Informal.
New South Wales	71,595	66,228	137,823
Victoria	100,520	22,099	122,619
South Australia	35,803	17,320	53,123
Tasmania	11,706	2,716	14,422

The Bill was not submitted to the popular vote in Western Australia, as the Enabling Act of that colony provided that Western Australia should only join a federation of which New South Wales formed a part. The other colonies also, although legally empowered to federate without New South Wales, tacitly admit that the adhesion of the mother colony must be secured before the final steps are taken. In New South Wales, politicians of all shades of thought are united in their desire for federation, only differing upon the question of the extent to which concessions shall be made for the purpose of securing the desired union, and it is confidently anticipated that within a very short time the Commonwealth of Australia will be called into existence.

DEFENCE.

IN all the colonies a small permanent military force, consisting for the most part of artillery and submarine miners, is maintained. The colonists of Australasia have always manifested an objection to the maintenance of a standing army, and shown a disposition to rely mainly upon the patriotism and valour of the citizens for their own defence; but each colony possesses a more or less complete system of fortifications, armed with expensive ordnance which requires a more regular and constant attendance than could well be bestowed by those who devote only a portion of their time to military affairs; hence it has been found advisable to institute the small permanent forces alluded to, whose chief duty it is to man the fortifications and keep the valuable armaments therein in a state of efficiency, so as to be ready for any emergency. At the same time, it is expected that they will prove the nucleus for an effective defence force if ever hostilities should unfortunately occur. The greater portion of the Australian forces, however, consists of volunteers enrolled under a system of partial payment, which affords an effective defence force without the disadvantages and expense of a standing army. The men receive payment according to the number of parades and night drills they attend, as compensation for wages lost while absent from their employment for the purpose of receiving military instruction. The remuneration varies in the different colonies, the New South Wales scale being 8s. for each whole-day parade, 4s. for a half-day parade, and 2s. for a night drill. There has been a marked tendency in most of the provinces to discourage the services of those who are purely volunteers, as the system was found to work unsatisfactorily, especially in the country districts. In New Zealand alone is the volunteer system the mainstay of defence.

The following table shows the strength of the military forces maintained by each colony. The figures refer to the year 1897, with the

exception of those for the colony of South Australia, which refer to the end of 1896 :—

Colony.	Paid.	Partially Paid.	Unpaid.	Total Forces.
New South Wales	591	4,280	4,066	8,937
Victoria	373	2,895	1,700	4,968
Queensland	189	1,905	1,742	3,836
South Australia	34	743	294	1,071
Western Australia	35	730	.....	765
Tasmania	12	431	1,124	1,567
New Zealand	250	.....	4,117	4,367
Australasia	1,484	10,984	13,043	25,511

The figures relating to Victoria, Queensland, and South Australia include the members of the civilian rifle clubs, numbering about 2,700 men. These men are all trained to the use of the rifle and are not unaccustomed to drill, and in time of need will be available to fill the ranks of the regular forces. The members of the rifle clubs of New South Wales, numbering 1,751 men in 1897, have been enrolled as a volunteer reserve force since 1895.

The relative strength of the various arms in the colonies may be summarised as follows :—

Staff, and all arms not enumerated	918
Artillery	4,193
Engineers	689
Cavalry	1,060
Mounted Rifles	2,816
Infantry	15,835

making a total strength, as shown above, of 25,511 men.

In addition to the military forces enumerated, all the colonies, with the exception of Tasmania and Western Australia, have small corps of Naval Volunteer Artillery, or partially-paid forces of a similar character, capable of being employed either as light artillery land forces or on board the local war vessels. The strength of the marine forces of the colonies is as follows:—

New South Wales	579
Victoria	310
Queensland	337
South Australia	168
Tasmania	39
New Zealand	1,004
Australasia	2,437

Thus, on their present footing the combined forces of all the Australasian colonies are 27,948 strong, and of these over 20,000 could be mobilised in any one of the colonies of Queensland, New South Wales, Victoria, or South Australia. Most of the colonies have also cadet companies, consisting of youths attending school, who are taught the

use of arms so as to fit them, on reaching manhood, for taking a patriotic share in the defence of their country. In some of the provinces the members of the police forces are, to some extent, also available for defence purposes. Neither the cadets nor the police are included in the figures given.

Naval Defence.

The boundaries of the Australian Naval Station have been defined as follow :—From 95° E. long. by the parallel of 10° S. lat. to 130° E. long. ; thence north to 12° N. lat., and along that parallel to 160° W. long. ; bounded on the south by the Antarctic Circle ; and including the numerous groups of islands situated within the limits specified.

The defence of the Australasian coast is entrusted to the British ships on the Australian Station and the Australasian Auxiliary Squadron. Sydney, the head-quarters of the fleet, ranks as a first-class naval station, and extensive repairing yards and store-houses have been provided for the accommodation of the ships of war. The vessels of the Imperial fleet are detailed below. The Penguin and Dart are engaged in surveying service, as was also the Waterwitch prior to its temporary despatch to the China station :—

Name.	Class.	Displacement.	Indicated horse-power.	Draught of water extreme.	Length.	Beam.	Armament. Guns.	Speed.	Coal endurance. Coal that can be carried in bunkers.	Coal endurance. Distance that can be steamed at 10 knots' speed.
		tons.		ft. in.	ft. in.	ft. in.		knots.	tons.	knots.
Royal Arthur	Twin-screw cruiser, 1st class, protected.	7,700	10,000	24 10	360 0	60 8	One 9·2-in. B.L., 12 6-in. B.L.Q.F., 12 6-Pr., 5 3-Pr., 7 Nordenfeldt.	19·75	1,250	10,000
Porpoise	Twin-screw cruiser, 3rd class.	1,770	3,500	15 4	225 0	36 0	Six 6-in. 5-ton B.L.V.C.P. 8 3-Pr., 2 Nordenfeldt.	16·5	325	7,000
Mohawk	Twin-screw cruiser, 3rd class.	1,770	3,500	15 7	225 0	36 0	Six 6-in. 5-ton B.L.V.C.P. 8 3-Pr., 2 Nordenfeldt.	16·5	325	7,000
Royalist..	Screw cruiser, 3rd class.	1,420	1,510	16 11	200 0	38 0	Two 6-in. 4-ton B.L.R., 10 5-in. 38-cwt. B.L.R., 4 M., 1 L.	13·1	425	6,600
Ringdove	Screw gunboat, 1st class.	805	1,200	13 2	165 0	31 0	Six 4-in. 25-cwt. B.L., 2 3-Pr., and 2 Nordenfeldt.	12·0	128	2,500
Goldfinch	Screw gunboat, 1st class.	805	1,200	13 3	165 0	30 0	Six 4-in. 26-cwt. B.L.R., 2 Q.F. Hotchkiss, 2 M.	13·0	105	..
Torch ..	Screw sloop ..	960	1,100	14 6	180 0	32 6	Six 4-in. Q.F., 4 3-Pr. Q.F. Hotchkiss, 2 0·45-in. Maxim.	13·25	130	2,000
Penguin .	Screw sloop..	1,130	700	14 0	180 0	38 0	Two 64-pr. M., 1 L., 2 M.	10·0	200	..
Dart	Screw yacht..	470	250	12 11	133 0	25 2	2 L., 2 M.....	8·8	64	..
Water-witch.	Screw yacht..	479	250	12 6	140 0	26 0	2 L., 2 M.....	9·0	70	..

Q.F., Quick-firing guns ; M., Machine guns ; L., Light guns under 15 cwt. ; B.L.R., Breech-loading rifled guns ; V.C.P., Vavasseur Centre Pivot.

The Royal Arthur has no armour, but carries a protective deck of steel, varying in thickness from 1 to 5 inches. Her 6-inch guns are also enclosed in casemates of steel 6-inch thick.

As opportunity offers, the Admiral of the Fleet is empowered to grant commissions, for periods not exceeding six months, to officers of the naval forces of the colonies, in order that they may gain some experience of the conditions under which modern naval warfare is practised. Six cadetships and three engineer studentships in the Imperial Navy are given annually to Australian boys, who must not be less than 14½ nor more than 15½ years of age to qualify for the former, and not less than 14 nor more than 17 years of age for the latter appointments.

An undertaking has been entered into by all the colonies for the payment of a *pro rata* subsidy towards the maintenance of an auxiliary fleet. The total subvention to be paid amounts to £126,000 per annum, the contribution of each colony being determined on the basis of population. The distribution of the subsidy in 1897, according to population, was as follows :—

	£
New South Wales	37,820
Victoria	34,244
Queensland	13,762
South Australia	10,499
Western Australia	4,020
Tasmania	4,841
New Zealand	20,814
Australasia	£126,000

The fleet consists of five fast cruisers and two torpedo gunboats of the Archer (improved type) and Rattlesnake classes of the British Navy. Three cruisers and one gunboat are continuously kept in commission, and the remainder are held in reserve in Australasian ports, ready for commission whenever circumstances may require their use. At the present time the vessels in reserve are the Katoomba, Mildura, Tauranga, and Boomerang, the Katoomba being used as guard-ship. The agreement is for a period of ten years, and is then or at the end of any subsequent year terminable, provided two years' notice has been given. The vessels have been built by the British Government; but the Australasian colonies pay the interest on their prime cost to the amount of £35,000, as well as the actual cost of maintenance, which is not to exceed £91,000, making the total sum of £126,000 which is distributed above. On the termination of the agreement the vessels will remain the property of the Imperial Government. The strength of the British fleet in Australian waters before the agreement was entered into is maintained independently of the presence of the Australasian vessels. The squadron is commanded by the Admiral on the Australian Station, whose head-quarters are in Sydney, where a residence is provided for

him by the colony of New South Wales. The squadron, which arrived in Port Jackson on the 5th September, 1891, consists of the following vessels :—

Name.	Displacement.	Indicated horse-power.	Draught of water extreme.	Length.	Beam.	Armament.		Speed.	Coal endurance.	
						Guns.	Torpedo tubes.		Coal that can be carried in bunkers.	Distance that can be steamed at 10 knots speed.
	tons.		ft. in.	ft. in.	ft. in.			knots.	tons.	knots.
Katoomba	2,575	7,500	17 6	265 0	41 0	Eight 4·7 Q.F. guns,	4	16·5	300	6,000
Ringarooma ..	2,575	7,500	17 6	265 0	41 0	eight 3-pr. Q.F. guns, one 7-pr. M.L.R. gun (boat and field), four 4·45-in. 5-barrel Nordenfeldt.	4	16·5	300	6,000
Mildura	2,575	7,500	16 6	265 0	41 0		4	16·5	300	6,000
Wallaroo	2,575	7,500	17 3	265 0	41 0		4	16·5	300	6,000
Tauranga	2,575	7,500	17 6	265 0	41 0		4	16·5	300	6,000
Boomerang ..	735	3,500	10 8	230 0	27 0	Two 4·7 in. Q.F. guns, four 3-pr. Q.F. guns.	3	*18·75	160	2,500
Karrakatta ..	735	3,500	10 9	230 0	27 0		3	*18·75	160	2,500

* This speed can be increased until, under favourable conditions, for a short period, a maximum of 21 knots can be obtained. Q.F.—Quick-firing guns. M.L.R.—Muzzle-loading rifled guns.

The Boomerang and Karrakatta are classed as torpedo gun-boats; all the other vessels are third-class screw cruisers. The hull of each vessel is of steel. The deck armour over machinery space is 2-in. and 1-in., and the conning-towers are protected by 3-inch armour, except in the case of the torpedo gun-boats, the towers of which have 1-in. armour. Each of the cruisers carries four, and each of the torpedo gun-boats three torpedo tubes.

The only war vessels which the colony of New South Wales possesses are two small torpedo boats, the Acheron and the Avernus, which are manned by the Naval Artillery Volunteers.

Victoria has the following vessels available for harbour defence :—

Name.	Class.	Displacement.	Armament.
		tons.	
Cerberus	Armoured turret ship (twin screw).	3,480	Four 10-in. 18-ton M.L.R., two 14-pdr. Q.F., six 6-pdr. Q.F., four 1-in. Nordenfeldts, 4 barrels.
Countess of Hopetoun.	First-class steel torpedo boat.	120	Three 14-in. Mark IX R.G.F. torpedoes, and two 2-barrel Nordenfeldt 1-in. M. guns.
Childers	do do ..	63	Two 14-in. Fiume torpedoes, and two 1-pdr. Hotchkiss Q.F. guns.
Nepean	Second-class steel torpedo boat.	12	Two 14-in. Mark IV Fiume torpedoes.
Lonsdale	do do ..	12	do do do
Gordon	Wooden torpedo boat ..	12	Two 14-in. Mark IV Fiume torpedoes, three 2-barrel 1-in. Nordenfeldt guns.
Commissioner	Wooden steam launch....	40	Spar torpedoes, and dropping gear for two 14-in. R L. torpedoes.
Customs No. 1....	do do ..	30	do do do

In addition to the vessels mentioned, Victoria formerly had in commission two steel gunboats, the Victoria and the Albert, the wooden frigate Nelson, and the armed steamer Gannet. In consequence of the promulgation of an opinion by the Colonial Defence Committee that where there are complete fixed defences floating defences do not add to the strength of a place, but in most cases even tend to weaken it, by interfering with and limiting the arcs of fire of the battery guns, it was decided to dispose of the vessels named, and to give up the use of the Melbourne Harbour Trust's hopper barges, the Batman and the Fawkner. In 1896 the Government of Western Australia purchased the gunboat Victoria, with the intention of employing it in surveying service; and the frigate Nelson was sold in 1898 to be broken up.

Queensland has two gunboats, one of which, the Paluma, was formerly employed on survey service on the coast of Queensland at the joint expense of the Queensland and British authorities. Afterwards, the Paluma was lent to the Imperial Government; and, since handed back to Queensland in April, 1895, has been placed in reserve. The other gunboat, the Gayundah, was paid off and placed in reserve on the 30th September, 1892. Particulars of the vessels available for the defence of Queensland ports are given below:—

Name.	Class.	Displacement.	Armament.
		Tons.	
Gayundah.....	Steel gunboat (twin screw)	360	One 8-in. B.L., one 6-in. B.L. Armstrong, two 3-pdr. 1½-in. Nordenfeldts, two 1-in. four-barrelled Nordenfeldts, one 0·45-in. five-barrelled Nordenfeldt.
Paluma	do ..	360	One 8-in. B.L. Armstrong, one 6-in. B.L. Armstrong, one 3-pdr. Q.F., 4 M.
Otter	Tender (twin screw).....	290	One 64-pounder, M.L.R.
Stingaree	do	450	One gun.
Midge.....	Steam pinnace	....	Three machine guns.
Mosquito	Second-class steel torpedo boat.	....	One machine gun.

South Australia maintains one twin-screw steel cruiser, the Protector, of 920 tons, and an auxiliary gun vessel. The armament of the Protector consists of one 8-in. 12-ton B.L., five 6-in. 4-ton B.L., four 3-pdr. Q.F., and five Gatling machine guns; while the auxiliary gun vessel carries two 6-in. 5-ton B.L. guns. Tasmania owns one Whitehead torpedo boat. Western Australia has the steel gunboat Victoria, purchased from the Victorian Government, and the Meda, a schooner of 150 tons, which are employed on survey service at the joint expense of the Imperial and Colonial Governments. New Zealand possesses four Thorneycroft torpedo boats and four steam launches fitted for torpedo work.

Cost of Defence.

Most of the colonies have spent considerable sums in works of defence, and the principal ports are well protected by extensive fortifications, erected by the various Governments. The total expenditure from the Consolidated Revenue for defence purposes during 1896-7 was as follows :—

Colony.	Amount.	Per head.
	£	s. d.
New South Wales	213,014	3 3
Victoria	181,959	3 1
Queensland	67,608	2 10
South Australia	30,468	1 8
Western Australia	18,683	2 9
Tasmania	10,047	1 2
New Zealand	68,551	1 11
Australasia	590,330	2 9

In all the colonies, with the exception of Western Australia, a certain amount of money has been spent out of loans on works of defence. For several years, however, Victoria has discontinued the expenditure of loan moneys for this service. The amounts thus spent during 1896–7 were as follow :—

	£
New South Wales	*11,102
Queensland	9,626
South Australia	473
Tasmania	65
New Zealand	10,554
Australasia	£31,820

* Inclusive of £5,720 for naval station, Port Jackson.

The total loan expenditure by each colony for defence purposes to the end of the financial year 1896-7 was as follows :—

Colony.	Amount.	Per head.
	£	s. d.
New South Wales	*1,242,006	18 11
Victoria	98,299	1 8
Queensland	224,494	9 5
South Australia	235,885	13 1
Tasmania	121,423	14 1
New Zealand	923,781	25 9
Australasia	2,845,888	13 3

* Inclusive of £313,670 for naval station, Port Jackson.

This does not represent the whole cost of the fortifications, as large sums have from time to time been expended from the general revenues of the colonies in the construction of works of defence; the amount of such payments, however, it is now impossible to determine. It is estimated that the present values of the defence works in the various colonies are as follow :—

New South Wales	£868,000
Victoria	486,000
Queensland	125,000
South Australia	137,000
Western Australia	12,000
Tasmania	103,000
New Zealand	417,000
Australasia	£2,148,000

In 1890 a military commission was appointed by the Imperial and the different Australian Governments to take evidence and report on the question of fortifying King George's Sound, Hobart, Thursday Island, and Port Darwin at the joint expense of the colonies. The commission visited the points mentioned during 1891, and as a result of the evidence taken fortifications have been erected at King George's Sound and Thursday Island, and it is probable that similar works will be begun at Hobart and Port Darwin in the near future. The garrison of the batteries in King George's Sound is supplied by Western Australia, and that colony bore one-fourth of the cost of construction and equipment, the other provinces contributing the remainder on a population basis. The cost of the defences at Thursday Island was shared by the different colonies in proportion to the number of their inhabitants. The forts are maintained under a like arrangement.

POPULATION.

ON the 26th January, 1788, Captain Phillip arrived in Sydney Harbour, bringing with him an establishment of about 1,030 people all told. Settlement soon spread from the parent colony, first to Tasmania in 1803, and afterwards to other parts of the continent and to New Zealand. At the end of 1897 the population of Australasia had increased to 4,410,151 persons, thus distributed :—

Colony.	Males.	Females.	Total.
New South Wales	709,360	614,100	1,323,460
Victoria	595,409	580,839	1,176,248
Queensland	271,372	213,328	484,700
South Australia	188,338	174,706	363,044
Western Australia	110,359	51,565	161,924
Tasmania	91,610	80,109	171,719
New Zealand	384,703	344,353	729,056
Australasia	2,351,151	2,059,000	4,410,151

If to these numbers, which principally comprise the people of European descent, there be added an estimated population of 200,000 Australian aborigines in an uncivilised state in Western Australia, South Australia, and Queensland, and of 39,854 Maoris in New Zealand, the total population of Australasia at the end of 1897 would be about 4,650,000.

The growth of the population of Australasia from the date of the first settlement is shown in the following table. An official enumeration of the people was made in most of the years quoted :—

Year.	Population of Australasia.	Annual Increase per cent.	Year.	Population of Australasia.	Annual Increase per cent.
1788	1,030	.....	1881*	2,742,550	3·60
1801	6,508	15·13	1891*	3,809,895	3·34
1811	11,525	11·94	1892	3,985,273	2·60
1821	35,610	5·88	1893	4,068,302	2·08
1831	79,306	8·34	1894	4,153,766	2·10
1841	211,095	10·28	1895	4,238,350	2·04
1851	430,596	7·36	1896	4,323,204	2·00
1861*	1,252,994	11·30	1897	4,410,151	2·01
1871*	1,924,770	4·39			

* Census population.

It is reasonable to expect that the rate of growth in the colonies would decline as the population increased, and such has been the case since 1851. The high rate of increase of 11·3 per cent. from 1851 to 1861 was, of course, due to the gold discovery, which proved a strong incentive to emigration to these colonies. The high annual increase between 1831 and 1841 was owing to the policy of State-aided immigration which was then in vogue. Prior to this period the high average arose from the small number of people on which the increase was calculated.

The following table shows the annual rate of increase of population in countries which are undergoing extensive settlement :—

Country.	Period.	Annual rate of Increase.
Argentine Republic	1869–95	2·33
Cape Colony (European or white races)	1875–91	1·78
Brazil	1872–90	1·95
Canada	1881–91	1·12
Chili	1885–95	0·71

The population of Australasia, as shown by the census of 1891, had increased threefold since 1861, and nearly twofold since 1871, while the annual rate of increase for the whole thirty years was 3·78 per cent. Taking the colonies individually, the rate of increase for Queensland was the highest—a circumstance partly to be attributed to the large numbers introduced under the system of State-aided immigration which has prevailed in that colony for many years ; but the largest numerical increase was that of New South Wales. The population of each colony (exclusive of aborigines, a few in New South Wales and Victoria excepted) at the last four census periods is shown below :—

Colony.	1861.	1871.	1881.	1891.	Annual Increase per cent., 1861-1891.
New South Wales	350,860	503,981	751,468	1,132,234	3·98
Victoria	540,322	731,528	862,346	1,140,405	2·52
Queensland	30,059	120,104	213,525	393,718	8·95
South Australia	126,830	185,626	279,865	320,431	3·12
West'rn Australia	15,691	25,353	29,708	49,782	3·92
Tasmania	90,211	101,785	115,705	146,667	1·63
New Zealand	99,021	256,393	489,933	626,658	6·34
Australasia	1,252,994	1,924,770	2,742,550	3,809,895	3·78

In order to show the great differences in the growth of the population of the individual colonies during the last ten years, the appended table has been prepared, giving the population at the end of each year since

1887. It is somewhat remarkable to notice that during the ten years Victoria has only added 143,255 to the number of its inhabitants, and that while at the end of 1890 its population was greater by 11,406 than that of New South Wales, at the close of the year 1897 the mother colony had the greater number of inhabitants by 147,212. During the first six months of 1898 there was a further decrease of 6,814 persons in Victoria, while New South Wales added 12,340 to its population in the same time :—

Year.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.	Australasia.
1887	1,020,330	1,032,993	356,982	308,215	42,488	135,988	601,929	3,498,925
1888	1,051,080	1,076,966	371,351	306,641	42,137	138,346	604,575	3,591,096
1889	1,081,820	1,103,727	383,960	311,112	43,698	142,177	616,559	3,683,053
1890	1,121,860	1,133,266	392,965	319,414	46,290	145,290	626,048	3,785,133
1891	1,165,300	1,157,678	410,330	325,766	53,285	152,619	634,058	3,899,036
1892	1,197,650	1,167,373	421,297	336,702	58,674	153,144	650,433	3,985,273
1893	1,223,370	1,174,006	432,299	346,874	65,064	154,424	672,265	4,068,302
1894	1,251,450	1,179,103	445,155	352,402	82,072	157,456	686,128	4,153,766
1895	1,277,870	1,181,751	460,550	357,405	101,235	160,833	698,706	4,238,350
1896	1,297,640	1,174,944	472,179	360,220	137,946	166,113	714,162	4,323,204
1897	1,323,460	1,176,248	484,700	363,044	161,924	171,719	729,056	4,410,151

The following table gives the total increase in each colony during the thirty-seven years, 1861–97, distinguishing the natural increase arising from the excess of births over deaths from the increase caused by the excess of arrivals over departures :—

Colony.	Excess of—		Total Increase.
	Births over Deaths.	Immigration over Emigration.	
New South Wales	618,643	356,271	974,914
Victoria	588,497	49,904	638,401
Queensland	184,883	271,761	456,644
South Australia	203,825	35,107	238,932
Western Australia	22,592	124,105	146,697
Tasmania	76,707	7,237	83,944
New Zealand	384,051	265,294	649,345
Australasia	2,079,198	1,109,679	3,188,877

The information conveyed by the above figures is important, as illustrating not only the movement of population but also the effect upon immigration of local influences, such as the attraction of liberal land laws, the fertility of the soil, the permanence of employment, and the policy of assisted immigration. But a bare statement of the gross increase to each colony from immigration is apt to be misleading, since the original density of population must be deemed a factor affecting

the current of immigration. The following figures show the density of population in each colony at various dates corresponding with those given in a preceding table :—

Colony.	1861.	1871.	1881.	1891.
New South Wales	1·13	1·62	2·42	3·65
Victoria	6·15	8·32	9·81	12·98
Queensland.....	0·04	0·18	0·32	0·59
South Australia.....	0·14	0·20	0·31	0·35
Western Australia	0·02	0·03	0·03	0·05
Tasmania	3·44	3·88	4·41	5·59
New Zealand	0·95	2·45	4·69	6·00
Australasia.....	0·41	0·63	0·89	1·24

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At the close of the year 1897 the population of Australasia, including the native races, only reached a density of 1·51 persons per square mile—a rate which is far below that of any other civilised country; and excluding Australian aborigines and Maoris, the density was not more than 1·43 per square mile. But a comparison of the density of population in Australasia with that in older countries of the world is of little practical use, beyond affording some indication of the future of these colonies when their population shall have reached the proportions to be found in the old world. The latest authoritative statements give the density of the populations of the great divisions of the world as follows :—

Continent.	Area in square Miles.	Population.	Persons per square mile.
Europe.....	3,742,000	372,925,000	99·66
Asia	17,101,000	830,558,000	48·57
Africa	11,510,000	170,050,000	14·77
America	14,805,000	132,718,000	8·96
Australasia and Pacific Islands.	3,457,000	5,907,000	1·71
Polar Regions.....	1,732,000	82,000	0·05
The World	52,347,000	1,512,240,000	28·89

From the earliest years of settlement there was a steady if not a powerful stream of immigration into these colonies, but in 1851, memorable for the finding of gold, the current was swollen by thousands of men in the prime of life who were attracted to the shores of Australia by the hope of speedily acquiring wealth. By far the greater number of these new arrivals settled in the new colony of Victoria, which had just been separated from New South Wales, and for some years afterwards Victoria had an unprecedented addition to its population. The vast changes which took place will be evident when it is stated that in 1850, just prior to the gold rush, the population of the northern and southern portions of New South Wales was :—

Port Phillip (afterwards Victoria)	76,162
Remaining portion of the Colony	189,341

While five years afterwards the population of the two colonies was :—

Victoria	364,324
New South Wales	277,579

Victoria enjoyed the advantage in population and increased its lead yearly until 1871, when its inhabitants exceeded in number those of New South Wales by no less than 229,654. But from that time almost every year showed a nearer approach in the numbers of the inhabitants of the two colonies, until at the census of 1891 Victoria had only a lead of 8,171, while at the end of that year New South Wales had the greater population by about 7,600. By the end of 1897 the parent colony had, as pointed out on a previous page, increased its lead to over 147,000, while the following six months increased the gap to 166,300.

Queensland and New Zealand, and Western Australia also in recent years, likewise owe much of their remarkable progress to the discovery of gold. In New Zealand the gold fever broke out in 1861, when the population numbered only 99,021, and the period of its activity extended over many years. At the census taken in 1891 the population had reached 626,658 souls, exclusive of Maoris, or fully six times that of 1861. In Queensland the attractive force of the gold-fields was exerted at a later date, and it may still be considered a powerful factor in stimulating the growth of population in that colony; while the development of Western Australia during the last five years has been wholly due to the gold deposits discovered in that colony, the population increasing from the small number of 65,064 at the end of 1893 to 161,924 at the end of 1897.

Much of the increase of population, especially in the colonies of New South Wales, Queensland, and New Zealand, was due to the State policy of assisted immigration. The following table shows the number of all

immigrants introduced into the colonies either wholly or partly at the expense of the State, to the end of 1897 :—

Colony.	Prior to 1881.	1881 to 1897.	Total.
New South Wales	177,234	34,724	211,958
Victoria	140,102	.....	140,102
Queensland	52,399	111,278	163,677
South Australia	88,050	7,298	95,348
Western Australia.....	889	5,848	6,737
Tasmania.....	18,965	2,734	21,699
New Zealand	*100,920	14,658	*115,578
Australasia	578,559	176,540	755,099

* Exclusive of number prior to 1870, of which no record can be found.

The following table shows the increase of population by excess of immigration over emigration for the four decennial periods ended 1890, and for the period of seven years 1891 to 1897 :—

Colony.	1851-60.	1861-70.	1871-80.	1881-90.	1891-97.
New South Wales.....	123,097	45,539	109,341	164,205	37,188
Victoria	398,753	38,935	*12,672	112,093	*88,452
Queensland	†	68,191	73,849	101,530	28,191
South Australia	33,024	17,949	34,569	*17,000	*411
Western Australia.....	6,870	5,319	*339	10,170	108,682
Tasmania	6,767	*3,228	*1,427	5,572	6,320
New Zealand.....	44,742	118,637	132,976	9,451	20,801
Australasia	613,253	291,342	336,297	386,021	112,319

* Denotes excess of emigrants. † Included in New South Wales figures.

Taking the last seventeen years, it will be seen from the next table that no colony exhibits uniformity in the immigration returns, some of the provinces even showing an excess of departures during several years; but, with the exception of South Australia, all the colonies show substantial increases from immigration over the whole period. If, however, the last seven years be made the basis of comparison, it will be found that great changes have taken place in the movement of population, Victoria having actually lost 88,452 persons by an excess of departures, while Western Australia gained 108,682 during

the same period. The only other colony which experienced a net loss was South Australia, the decrease since 1891 amounting to 411 persons :—

Year.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.	Australasia.
1881	16,673	4,976	4,009*	12,055	401	1,166	1,970	33,232
1882	16,034	6,563	17,043	3,679*	94	587	2,375	39,017
1883	27,278	6,597	34,371	4,266	436	689	8,657	82,294
1884	23,944	8,525	18,620	275	871	816	7,724	60,775
1885	24,829	9,027	7,056	9,280*	1,628	388*	2,757	35,629
1886	18,073	15,436	7,695	8,819*	3,738	302*	199*	35,622
1887	7,202	15,445	11,527	3,008*	2,049	1,797	211	35,223
1888	6,633	25,757	5,651	8,325*	1,196*	383*	10,548*	17,589
1889	8,241	9,794	4,340	2,346*	578	1,172	701*	21,078
1890	15,298	9,973	764*	1,861	1,571	418	2,795*	25,562
1891	20,268	4,538	7,820	168*	6,078	4,592	3,745*	39,383
1892	6,720	12,285*	1,330	4,107	4,472	2,371*	4,958	6,931
1893	1,400	13,411*	2,303	4,025	5,223	1,865*	10,412	8,087
1894	4,300	13,731*	4,177	930*	15,966	118	2,253	12,153
1895	2,560	15,422*	5,673	1,601*	18,394	398	895	10,897
1896	897*	23,271*	3,257	3,150*	35,949	2,578	3,276	17,742
1897	2,837	14,870*	3,631	2,694*	22,600	2,870	2,752	17,126

* Denotes excess of departures.

Ages of the People.

At the census of 1891 the average age of the population of Australasia was 24·4 years; the average age of the males was 25·5 years, and that of the females 23·3 years. Taking the colonies separately, it will be seen from the following table that the oldest population was that of Victoria, with an average of 25·6 years; and the youngest that of Queensland, with an average of 23·7 years. The male population of Western Australia had the highest age average, namely, 27·6 years, owing to the large influx of adult males some few years before, attracted thither by the discoveries of gold at Kimberley and elsewhere. The youngest male populations were in New South Wales and South Australia, averaging 25·1 and 24·7 years respectively. The youngest female population was found in Queensland, where the average was 21·5 years; while the oldest was in Victoria, averaging 24·6 years :—

Colony.	Males.	Females.	Persons.
New South Wales	25·1	22·5	23·9
Victoria	26·5	24·6	25·6
Queensland	25·2	21·5	23·7
South Australia	24·7	23·8	24·3
Western Australia.....	27·6	22·0	25·3
Tasmania	25·6	23·7	24·7
New Zealand	25·2	23·4	24·1
Australasia	25·5	23·3	24·4

In considering these figures it must be remembered that the same average may be due to opposite causes; for instance, a large middle-age population with a small proportion of children and old people, as in Queensland, gives much the same result as a large population at the dependent ages and a small proportion of those at the supporting ages, as in Tasmania. The following table shows the number of males at the dependent ages from infancy to 15 years; at the supporting ages from 15 to 65; and in the old age group, from 65 years upwards :—

Colony.	Dependent Ages up to 15 years.		Supporting Ages, 15 and under 65.		Old Ages, 65 and over.	
	Number.	Percentage of Male Population.	Number.	Percentage of Male Population.	Number.	Percentage of Male Population.
New South Wales...	217,991	35·85	373,346	61·41	16,666	2·74
Victoria.....	199,599	33·37	374,871	62·68	23,619	3·95
Queensland	74,180	33·15	145,960	65·22	3,639	1·63
South Australia ...	64,004	38·37	97,293	58·33	5,504	3·30
Western Australia..	8,565	28·73	20,148	67·60	1,094	3·67
Tasmania	29,003	37·39	44,256	57·06	4,301	5·55
New Zealand...	126,531	38·01	197,979	59·48	8,367	2·51
Australasia ...	719,873	35·34	1,253,853	61·56	63,190	3·10

It will have been noticed in the table on the preceding page that during certain years, notably 1885 to 1891, there was an exodus of population from New Zealand, South Australia, and Tasmania, the persons who left being mainly able-bodied men in search of employment. It is only reasonable, therefore, that the number of males of the supporting ages in those colonies should be below the average. The reverse is the case in Western Australia, where the proportion of dependent males is smaller than in any other colony, while the proportion of men of the supporting ages is greater. These facts are to be accounted for by the immigration into Western Australia of large numbers of adult males, many of whom probably came from one of the three colonies first mentioned. The high birth-rate of New South Wales accounts for the larger proportion of persons of dependent ages as compared with Victoria, but at the supporting ages there is very little difference between the two colonies. With regard to the old age group, the proportion in Queensland, 1·63 per cent., is undoubtedly low. Tasmania, with 5·55 per cent., has the largest proportion of aged inhabitants; Victoria comes next with 3·95 per

cent.; while the proportion of inhabitants of 65 years and over in New South Wales is only 2·74 per cent., or one-half of the proportion shown by Tasmania.

The following table shows, in quinquennial periods, the ages of the people in each of the Australasian colonies:—

Ages.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.
MALES.							
Under 5 years	83,640	75,185	30,458	23,015	3,428	10,840	42,266
5 to 10 ,,	72,511	65,418	23,820	21,827	2,756	9,879	43,502
10 to 15 ,,	61,840	58,996	19,902	19,162	2,381	8,284	40,763
15 to 20 ,,	53,931	57,264	18,203	15,363	2,221	7,073	32,586
20 to 25 ,,	57,666	63,413	24,094	15,380	3,371	7,155	28,445
25 to 30 ,,	59,752	63,080	25,723	14,400	3,864	7,461	23,797
30 to 35 ,,	51,933	47,864	21,356	13,426	2,909	6,052	22,106
35 to 40 ,,	40,238	31,824	15,593	10,758	1,965	4,487	20,594
40 to 45 ,,	31,227	24,034	12,217	8,115	1,426	3,319	17,824
45 to 50 ,,	26,865	22,111	10,538	6,827	1,237	2,577	17,094
50 to 55 ,,	22,586	22,804	9,192	5,401	1,220	2,298	16,836
55 to 60 ,,	16,644	22,264	5,448	4,094	1,051	1,933	10,981
60 to 65 ,,	12,504	20,213	3,596	3,529	884	1,901	7,716
65 to 70 ,,	6,945	11,144	1,793	2,378	524	1,493	3,939
70 to 75 ,,	4,997	7,240	1,079	1,723	373	1,406	2,515
75 to 80 ,,	2,837	3,210	505	850	131	791	1,195
80 and upwards	1,887	2,025	262	553	66	611	718
Total Males	608,003	598,089	223,779	166,801	29,807	77,560	332,877
FEMALES.							
Under 5 years	81,354	73,471	29,874	22,266	3,381	10,628	40,955
5 to 10 ,,	70,977	63,966	23,275	21,267	2,597	9,521	42,596
10 to 15 ,,	60,867	57,878	19,258	18,641	2,376	8,178	40,338
15 to 20 ,,	54,160	57,859	17,131	15,617	2,071	6,818	32,665
20 to 25 ,,	53,133	61,655	18,718	14,923	2,181	6,582	29,855
25 to 30 ,,	46,673	55,220	15,964	12,937	1,892	6,066	22,416
30 to 35 ,,	36,424	39,840	12,161	10,690	1,416	4,936	17,923
35 to 40 ,,	27,110	26,508	8,548	8,290	979	3,443	15,133
40 to 45 ,,	22,003	21,430	6,869	6,339	774	2,753	13,459
45 to 50 ,,	18,491	19,747	6,108	5,517	645	2,338	11,854
50 to 55 ,,	14,662	19,290	4,690	4,931	559	2,143	9,940
55 to 60 ,,	10,721	16,220	2,983	3,837	444	1,784	6,161
60 to 65 ,,	7,677	12,915	1,991	3,251	281	1,488	4,475
65 to 70 ,,	4,865	7,181	1,145	2,169	161	969	2,568
70 to 75 ,,	3,658	4,803	727	1,534	126	766	1,878
75 to 80 ,,	1,903	2,267	301	830	52	401	936
80 and upwards	1,273	1,501	196	591	40	293	629
Total Females	515,951	541,751	169,939	153,630	19,975	69,107	293,781

The period from 20 to 40 years is considered the "soldier's age," as men of such ages would be the first to be called upon for the defence of the country in case of war. At the census of 1891 Australasia had a force of nearly 700,000 men to draw upon for this purpose, of whom New South Wales would have contributed 209,589, Victoria 206,181, Queensland 86,766, South Australia 53,964, Western Australia 12,109, Tasmania 25,155, and New Zealand, 94,942.

The female population of Australasia may be conveniently grouped into three divisions, namely, dependent ages, from infancy to 15 years;

reproductive ages, from 15 to 45; and those over 45 years of age. The numbers of each class in the several provinces are shown below: —

Colony.	Dependent ages, up to 15 years.		Reproductive ages, 15 and under 45.		Ages of 45 years and over.	
	Number.	Percentage of Female Population.	Number.	Percentage of Female Population.	Number.	Percentage of Female Population.
New South Wales	213,198	41·32	239,503	46·42	63,250	12·26
Victoria	195,315	36·05	262,512	48·46	83,924	15·49
Queensland	72,407	42·61	79,391	46·72	18,141	10·67
South Australia	62,174	40·47	68,796	44·78	22,660	14·75
Western Australia	8,354	41·82	9,313	46·62	2,308	11·56
Tasmania	28,327	40·99	30,598	44·28	10,182	14·73
New Zealand	123,889	42·17	131,451	44·74	38,441	13·09
Australasia	703,664	39·89	821,564	46·57	238,906	13·54

The female population, it will be seen, is distributed among the various colonies in much more even proportions than the male population. Victoria has the smallest ratio of dependent females, the greatest proportion of those of reproductive ages, and the highest relative number of females over the reproductive age. The rates for the other provinces are remarkably even, New South Wales, Queensland, and Western Australia having almost an identical proportion of reproductive females, while South Australia, Tasmania, and New Zealand are nearly equal at a slightly lower rate.

Births.

The total number of births in each colony and the rate per thousand of the population during the year 1897 are shown in the following table :—

Colony.	Births.			Birth-rate.
	Males.	Females.	Total.	
New South Wales	18,989	18,258	37,247	28·42
Victoria	16,005	15,297	31,302	26·62
Queensland	7,277	7,036	14,313	29·92
South Australia	4,897	4,665	9,562	26·44
Western Australia	2,036	1,985	4,021	26·82
Tasmania	2,483	2,200	4,683	27·72
New Zealand	9,600	9,137	18,737	25·96
Australasia	61,287	58,578	119,865	27·45

The number of births in each colony and in the whole of Australasia, in quinquennial periods from 1861 to 1895, and in the two years 1896–97, was as follows :—

Colony.	1861–65.	1866–70.	1871–75.	1876–80.	1881–85.	1886–90.	1891–95.	1896–97.
New South Wales ..	79,958	92,643	106,543	127,572	158,965	188,300	197,566	73,753
Victoria.....	123,353	131,052	136,363	132,347	140,258	172,307	180,852	63,480
Queensland	11,761	22,622	29,279	37,535	48,979	70,150	72,863	28,330
South Australia	30,472	35,067	36,398	46,310	56,618	53,200	53,093	19,610
Western Australia..	3,352	3,724	4,033	4,611	5,446	7,696	10,242	6,803
Tasmania	15,454	14,679	15,313	17,165	21,425	23,710	24,794	9,286
New Zealand	26,611	46,770	59,891	88,205	96,482	94,071	91,410	37,349
Australasia	290,961	346,557	387,820	453,745	528,173	609,434	630,820	238,611

The average birth-rates of each colony for the same periods were as follow :—

Colony.	1861–65.	1866–70.	1871–75.	1876–80.	1881–85.	1886–90.	1891–95.	1896–97.
New South Wales ..	42·71	40·70	39·05	38·53	37·65	36·36	32·72	28·38
Victoria	43·30	39·27	35·69	31·43	30·76	32·72	31·00	26·97
Queensland	43·07	43·91	40·81	36·72	36·37	38·81	34·11	29·98
South Australia	44·14	40·60	37·24	38·28	38·52	34·48	31·22	27·22
Western Australia ..	39·07	33·86	31·30	32·97	34·57	36·88	30·76	25·24
Tasmania	33·80	29·65	29·72	31·54	35·02	34·59	32·17	27·94
New Zealand	38·22	42·28	40·02	41·32	36·50	31·22	27·66	26·15
Australasia	41·92	39·84	37·34	36·38	35·21	34·43	31·35	27·59

Particulars relating to illegitimate births will be found in the chapter headed "Social Condition."

DEATHS.

The following table shows the total number of deaths and the rate per thousand of the population during the year 1897 :—

Colony.	Deaths.			Death-rate.
	Males.	Females.	Total.	
New South Wales.....	8,314	5,950	14,264	10·88
Victoria	8,533	6,595	15,128	12·87
Queensland	3,483	1,940	5,423	11·33
South Australia.....	2,256	1,788	4,044	11·18
Western Australia	1,825	818	2,643	17·63
Tasmania	1,116	831	1,947	11·53
New Zealand	3,787	2,808	6,595	9·14
Australasia	29,314	20,730	50,044	11·46

The number of deaths in each colony and in the whole of Australasia, in quinquennial periods from 1861 to 1895, and in the two years 1896–97, is shown in the following table :—

Colony.	1861–65.	1866–70.	1871–75.	1876–80.	1881–85.	1886–90.	1891–95.	1896–97.
New South Wales ..	31,561	36,466	40,909	53,256	66,103	71,457	76,802	30,103
Victoria.....	49,452	55,136	59,759	62,811	66,811	84,648	82,056	30,842
Queensland	5,751	9,312	12,869	17,284	25,731	28,040	26,581	11,068
South Australia	10,840	12,963	15,475	18,026	21,616	19,361	20,535	8,127
Western Australia..	1,399	1,711	2,068	2,003	2,709	3,332	5,430	4,663
Tasmania	6,953	6,962	8,060	8,994	9,790	10,389	10,123	3,848
New Zealand	10,001	13,328	19,354	25,254	29,074	29,746	33,525	13,027
Australasia	115,957	135,878	158,494	187,628	221,834	246,973	255,052	101,678

The average death-rates of each colony for the periods shown in the above table are given below ; but the statement does not afford a just comparison between the colonies, as no account is taken of the ages of the people :—

Colony.	1861–65.	1866–70.	1871–75.	1876–80.	1881–85.	1886–90.	1891–95.	1896–97.
New South Wales ..	16·86	16·05	14·99	16·09	15·66	13·80	12·72	11·58
Victoria.....	17·36	16·52	15·64	14·92	14·65	16·07	14·06	13·10
Queensland	21·06	18·07	17·94	16·90	19·10	15·52	12·44	11·71
South Australia	15·70	15·01	15·83	14·90	14·71	12·55	12·08	11·28
Western Australia ..	16·31	15·55	16·03	14·32	17·19	15·97	16·31	17·30
Tasmania	15·20	14·06	15·64	16·52	16·00	15·16	13·13	11·58
New Zealand	14·36	12·05	12·93	11·83	11·00	9·87	10·14	9·12
Australasia	16·75	15·62	15·26	15·04	14·79	13·95	12·68	11·76

Compared with European countries the Australasian colonies occupy a very favourable position in respect to both birth and death rates. The Australasian birth-rate is high, and in European countries where it is higher it will be seen, on reference to the subjoined table, that the death-rate is so considerably in excess that the difference between the two, representing the gain to each country by natural increase, is largely in favour of Australasia. In the case of Sweden the figures

given cover the period of nine years from 1887 to 1895; for all other countries they refer to the ten years 1887-96 :—

Country.	Birth Rate.	Death Rate.	Excess of Births per 1,000 inhabitants.
New South Wales	33·03	12·79	20·24
Victoria	31·15	14·71	16·44
Queensland	34·01	12·88	21·13
South Australia	31·63	11·95	19·68
Western Australia	28·61	14·83	13·78
Tasmania	32·18	13·57	18·61
New Zealand	28·41	9·77	18·64
Australasia	31·68	12·88	18·80
England and Wales	30·67	18·57	12·11
Scotland	30·87	18·78	12·09
Ireland	22·92	18·07	4·85
United Kingdom	29·74	18·53	11·21
France	22·60	21·97	0·63
Germany	36·32	23·30	13·02
Belgium	29·03	19·80	9·23
Netherlands	33·10	19·57	13·53
Austria	37·66	28·10	9·56
Hungary	42·02	31·56	10·46
Switzerland	27·97	20·05	7·92
Italy	36·67	25·97	10·70
Denmark	30·74	18·38	12·36
Norway	30·36	16·76	13·60
Sweden	27·92	16·48	11·44

No better testimony to the salubrity of the climate of Australasia could be obtained than is afforded by these figures. There are, of course, various circumstances other than climatic which would tend to make the mortality lighter in these than in older-settled countries, but when all possible allowances are made for such circumstances a comparison between these colonies and the countries of Europe is still significantly favourable to Australasia.

Indexes of Mortality.

So far consideration has only been given to the actual death-rates as they are obtained by taking the proportion which the number of deaths bears to the number of inhabitants. It is well known, however, that the death-rate of a country is affected by more than the salubrity of its climate, the degree of perfection to which the sanitary condition of its cities and towns and villages has been brought, and the nature of the

industrial pursuits of its people. Actuarial science has demonstrated the fact that when a male child is born in the colony of New South Wales it may expect to live until it is 49·60 years old; if it survives until it is 2 years of age, it may expect to live 56·37 years; while as it grows older the expectation of life gradually diminishes until at 90 years of age the man may count upon but 2·54 years of life. It is plain, therefore, that a country which has a large proportion of young people will, other things being equal, have a lower death-rate than another which has a comparatively large proportion of old persons. It is this fact that statistical science now seeks to take into account in establishing the rates of mortality of the various countries of the world. It is not practicable to base a rate on any table showing the expectation of life at successive ages; but it is practicable to select a country, divide its population into certain age-groups, and ascertain the mortality of all countries on the assumption that the ages of the population of each hold the same proportions to the total inhabitants as do those of the selected country. This is the course which has been suggested by the International Statistical Institute, in its 1895 session, held at Berne. It has adopted the population of Sweden, as ascertained at the census of 1890, as the standard, and divided it into the five age-groups of under 1 year, 1 year and under 20 years, 20 years and under 40 years, 40 years and under 60, and 60 years and upwards, obtaining the percentages of 2·55, 39·80, 26·96, 19·23, and 11·46 respectively. Applying these age proportions to the population of each of the Australasian colonies as ascertained at the census of 1891, the "index of mortality," as distinguished from the actual "death-rate," is found as given below for each of the last seven years. How greatly the ages of the people of a country affect its mortality will be evident from the fact that whereas in 1896 the death-rates of the colonies ranged from 9·10 in New Zealand to 16·53 in Western Australia, or 7·43 per thousand, the range of the indexes of mortality was only 4·47 per thousand, namely, from 13·01 in New Zealand to 17·48 in Western Australia. In comparing the indexes of various years it must not be forgotten that the composition of the population of some of the colonies, notably of Western Australia, has changed since the last census was taken :—

Colony.	1890.	1891.	1892.	1893.	1894.	1895.	1896.
New South Wales.....	16·51	18·68	15·65	16·71	16·32	15·69	16·45
Victoria	18·71	19·48	16·24	16·73	15·96	16·39	16·48
Queensland.	17·29	15·52	15·82	16·66	16·29	15·21	16·73
South Australia.....	15·33	16·75	14·07	16·10	14·61	14·36	14·44
Western Australia ...	15·11	21·54	18·94	18·08	16·65	18·86	17·48
Tasmania	17·25	18·01	15·64	15·43	14·74	13·40	13·89
New Zealand	12·87	13·95	13·59	13·56	14·44	13·98	13·01
Australasia	16·68	17·83	15·47	16·16	15·68	15·49	15·71

Ages at Death.

A detailed statement of the ages at death of the males who died during the year 1896 in the six colonies of New South Wales, Victoria, Queensland, South Australia proper, Tasmania, and New Zealand, is given below. The returns for Western Australia do not distinguish the sex of the persons who died, and no vital statistics are published for the Northern Territory :—

Ages at Death.	New South Wales.	Victoria.	Queensland.	*South Australia.	Tasmania.	New Zealand.	Total.
Under 1 year	2,424	1,950	793	557	223	817	6,764
1 and under 2 years..	468	365	158	63	30	109	1,193
2 ,, 3 ,, ...	141	127	64	24	10	34	400
3 ,, 4 ,, ..	77	71	56	18	11	35	268
4 ,, 5 ,, ..	65	65	34	18	6	31	219
5 ,, 10 ,, ..	225	196	84	44	26	100	675
10 ,, 15 ,, ..	160	138	68	51	23	78	518
15 ,, 20 ,, ..	247	198	110	61	29	122	767
20 ,, 25 ,, ..	268	230	185	85	32	168	968
25 ,, 30 ,, ..	309	350	228	64	39	149	1,139
30 ,, 35 ,, ..	377	305	199	91	29	119	1,120
35 ,, 40 ,, ..	410	344	219	83	47	146	1,249
40 ,, 45 ,, ..	415	265	204	90	31	141	1,146
45 ,, 50 ,, ..	427	255	158	74	28	191	1,133
50 ,, 55 ,, ..	460	337	216	85	30	201	1,329
55 ,, 60 ,, ..	469	488	198	130	38	267	1,590
60 ,, 65 ,, ..	562	710	194	120	61	279	1,926
65 ,, 70 ,, ..	505	829	150	112	70	254	1,920
70 ,, 75 ,, ..	409	627	110	112	90	204	1,552
75 years and upwards..	833	1,044	124	238	252	331	2,822
Unspecified	5	8	22	1	3	.....	39
Total	9,256	8,902	3,574	2,121	1,108	3,776	28,737

* Exclusive of Northern Territory.

Similar information respecting the deaths of females in 1896 is given in the following table :—

Ages at Death.	New South Wales.	Victoria.	Queensland.	*South Australia.	Tasmania.	New Zealand.	Total.
Under 1 year	2,011	1,590	673	458	187	622	5,541
1 and under 2 years..	421	329	135	88	30	106	1,109
2 ,, 3 ,, ..	159	115	44	25	10	25	378
3 ,, 4 ,, ..	89	76	38	23	6	41	273
4 ,, 5 ,, ..	70	47	35	19	11	33	215
5 ,, 10 ,, ..	194	185	67	46	17	85	594
10 ,, 15 ,, ..	114	110	40	41	11	52	368
15 ,, 20 ,, ..	207	225	56	78	25	135	726
20 ,, 25 ,, ..	267	274	76	76	40	145	878
25 ,, 30 ,, ..	290	304	84	93	49	130	950
30 ,, 35 ,, ..	241	385	99	100	31	111	967
35 ,, 40 ,, ..	298	300	97	92	41	103	931
40 ,, 45 ,, ..	226	244	70	63	21	107	731
45 ,, 50 ,, ..	215	208	82	62	25	98	690
50 ,, 55 ,, ..	236	249	80	66	29	106	757
55 ,, 60 ,, ...	255	301	84	67	34	159	900
60 ,, 65 ,, ..	276	412	83	107	46	126	1,050
65 ,, 70 ,, ..	234	419	67	84	44	135	983
70 ,, 75 ,, ..	250	355	55	81	41	104	886
75 and upwards	530	679	105	248	104	233	1,899
Unspecified	....	5	1	....	....	....	6
Total	6,583	6,812	2,071	1,917	793	2,656	20,832

* Exclusive of Northern Territory.

The ages of the 2,020 persons who died in Western Australia during 1896 are given without distinguishing sex. It has been possible, therefore, to include them in the following table of the total deaths of persons of both sexes; but to admit of their inclusion it has been necessary to alter the age-groups. The total for Australasia is, however, exclusive of the Northern Territory:—

Ages at Death.	New South Wales.	Victoria.	Queensland.	*South Australia.	Western Australia.	Tasmania.	New Zealand.	*Australasia.
Under 1 year	4,435	3,540	1,466	1,015	513	410	1,439	12,818
1 and under 5 years..	1,490	1,195	564	278	105	114	414	4,160
5 ,, 10 ,, ..	419	381	151	90	21	43	185	1,290
10 ,, 15 ,, ..	274	248	108	92	19	34	130	905
15 ,, 20 ,, ..	454	423	166	139	68	54	257	1,561
20 ,, 30 ,, ..	1,134	1,158	573	318	448	160	592	4,383
30 ,, 40 ,, ..	1,326	1,334	614	366	303	148	479	4,570
40 ,, 60 ,, ..	2,703	2,347	1,092	637	317	227	1,270	8,593
60 ,, 65 ,, ..	838	1,122	277	227	71	107	405	3,047
65 ,, 70 ,, ..	739	1,248	217	196	53	114	389	2,956
70 and upwards	2,022	2,705	394	679	102	487	872	7,261
Unspecified	5	13	23	1	....	3	....	45
Total	15,839	15,714	5,645	4,038	2,020	1,901	6,432	51,589

* Exclusive of Northern T rritory.

It will be seen that about one-fourth of the deaths which occurred during 1896 were those of children under 1 year. The total number of births during the year was 119,865; the deaths of children under 1 year were, therefore, at the rate of 107 for every 1,000 births. Deaths of all children under 5 years numbered 16,978; of persons 5 years of age and under 65 years, 24,349; and of old people of 65 years and upwards, 10,217.

Causes of Death.

The system of classifying the causes of death adopted in the Australasian colonies is that arranged by Dr. William Ogle on the basis of the older system of Dr. William Farr, his predecessor as Registrar-General of England. Under this classification deaths are divided into seven classes, namely, deaths from zymotic diseases, from parasitic diseases, from dietetic diseases, from constitutional diseases, from developmental diseases, from local diseases, from violence, and from ill-defined or unspecified causes. As the returns for Western Australia do not distinguish the sex of the persons whose deaths were recorded, it is necessary to omit that colony from the tables showing separately the causes of deaths of males and females. Statistics for the Northern Territory are not available. The following were the assigned causes of death of the 28,737 males who died in New South Wales, Victoria,

Queensland, South Australia proper, Tasmania, and New Zealand in the course of the year 1896 :—

Classification.	New South Wales.	Victoria.	Queensland.	South Australia. *	Tasmania.	New Zealand.	Total.
Specific febrile or zymotic diseases—							
Miasmatic diseases	580	411	178	100	62	154	1,485
Diarrhœal diseases	526	304	232	134	27	176	1,399
Malarial diseases	8	3	34	1	....	2	48
Zoogenous diseases	1	....	....	....	....	....	1
Venereal diseases	40	28	30	3	4	20	125
Septic diseases	40	25	22	23	5	22	137
Total	1,195	771	496	261	98	374	3,195
Parasitic diseases	35	36	18	9	3	6	107
Dietetic diseases	147	98	95	15	4	46	405
Constitutional diseases	1,244	1,584	597	353	118	635	4,531
Developmental diseases	879	761	207	228	218	287	2,580
Local diseases—							
Diseases of nervous system	963	804	348	223	127	427	2,892
Diseases of organs of special sense	7	7	2	5	....	4	25
Diseases of circulatory system	657	873	297	166	128	391	2,512
Diseases of respiratory system	1,153	1,229	432	233	128	427	3,602
Diseases of digestive system	991	1,059	379	191	66	343	3,029
Diseases of lymphatic system and ductless glands	12	16	11	5	1	7	52
Diseases of urinary system	382	412	117	84	41	168	1,204
Diseases of organs of generation	7	....	2	2	....	1	12
Diseases of organs of locomotion	22	44	10	8	6	15	105
Diseases of integumentary system	29	32	11	4	3	14	93
Total	4,223	4,476	1,609	921	500	1,797	13,526
Violence—							
Accident or negligence	873	601	423	160	96	407	2,560
Homicide	28	23	10	6	....	2	69
Suicide	155	90	62	24	11	58	400
Execution	1	1	....	....	....	....	2
Violent deaths not classified	6	....	....	....	....	....	6
Total	1,063	715	495	190	107	467	3,037
Ill-defined and not specified causes	470	461	57	144	60	164	1,356
Grand Total	9,256	8,902	3,574	2,121	1,108	3,776	28,737

* Exclusive of Northern Territory.

It will be seen that local diseases accounted for nearly one-half of the total number of deaths, or for 13,526 out of 28,737. Next in order came constitutional diseases with 4,531 deaths; zymotic diseases, with 3,195 deaths; and violent deaths to the number of 3,037, of which 2,560 were due to accident. Developmental diseases were assigned as the cause of death in 2,580 cases, dietetic diseases in 405 cases, and parasitic diseases in 107 cases. Deaths from ill-defined or not specified causes amounted to nearly 5 per cent. of the total, numbering no less than 1,356.

A similar classification of the causes of death of the 20,832 females who died in the six colonies during 1896 gives the following results :—

Classification.	New South Wales.	Victoria.	Queensland.	South Australia. *	Tasmania.	New Zealand.	Total.
Specific febrile or zymotic diseases—							
Miasmatic diseases	462	358	150	95	36	163	1,264
Diarrhœal diseases	494	234	179	120	21	158	1,206
Malarial diseases	4	....	9	....	....	....	13
Venereal diseases	19	27	6	2	3	6	63
Septic diseases	112	121	17	76	13	23	362
Total	1,091	740	361	293	73	350	2,908
Parasitic diseases	38	34	7	5	6	11	101
Dietetic diseases	65	60	33	11	1	15	185
Constitutional diseases	999	1,237	291	345	132	571	3,575
Developmental diseases	613	514	157	213	93	225	1,815
Local diseases—							
Diseases of nervous system	690	678	222	206	99	318	2,213
Diseases of organs of special sense	11	13	2	8	1	3	38
Diseases of circulatory system	377	646	149	160	84	261	1,677
Diseases of respiratory system	742	821	278	182	97	261	2,381
Diseases of digestive system	847	1,004	263	195	76	244	2,629
Diseases of lymphatic system and ductless glands	7	11	7	3	2	7	37
Diseases of urinary system	192	225	58	47	16	51	589
Diseases of organs of generation	37	54	18	11	2	23	145
Diseases of parturition	168	121	55	30	17	77	468
Diseases of organs of locomotion	11	23	4	7	1	10	56
Diseases of integumentary system	18	24	14	2	2	9	69
Total	3,100	3,620	1,070	851	397	1,264	10,302
Violence—							
Accident or negligence	262	225	114	61	27	106	795
Homicide	15	18	4	2	1	3	43
Suicide	27	26	8	7	2	12	82
Total	304	269	126	70	30	121	92
Ill-defined and not specified causes	373	338	26	129	61	99	1,026
Grand Total	6,583	6,812	2,071	1,917	793	2,656	20,832

* Exclusive of Northern Territory.

As in the case of the deaths of males, local diseases were assigned as the cause of deaths in nearly one-half of the total deaths of females, namely, in 10,302 out of 20,832. Next came deaths from constitutional diseases, 3,575 ; from zymotic diseases, 2,908 ; and from developmental diseases, 1,815. Violent deaths were, of course, far less numerous than in the case of men, numbering 920. If accidents alone be considered, the deaths of women were only one-third of those of men, namely, 795, as compared with 2,560. Deaths from dietetic diseases numbered 185,

and from parasitic diseases, 101. Death from ill-defined and unspecified causes were recorded as 1,026.

In the following table, giving the causes of death of all persons in 1896, it has been possible to include Western Australia :—

Classification.	New South Wales.	Victoria.	Queensland.	South Australia. *	Western Australia.	Tasmania.	New Zealand.	Australasia.*
Specific febrile or zymotic diseases—								
Miasmatic diseases	1,042	769	328	195	426	98	317	3,175
Diarrhœal diseases	1,020	538	411	254	129	48	334	2,734
Malarial diseases	12	3	43	1	13	....	2	74
Zoogenous diseases	1	..	....	..	..	....	..	1
Venereal diseases	59	55	36	5	2	7	26	190
Septic diseases	152	146	39	99	16	18	45	515
Total	2,286	1,511	857	554	586	171	724	6,689
Parasitic diseases	73	70	25	14	..	9	17	208
Dietetic diseases	212	158	128	26	31	5	61	621
Constitutional diseases	2,243	2,821	888	698	145	250	1,206	8,251
Developmental diseases	1,492	1,275	364	441	125	311	512	4,520
Local Diseases—								
Diseases of nervous system	1,653	1,482	570	429	121	226	745	5,226
Diseases of organs of special sense	18	20	4	13	..	1	7	63
Diseases of circulatory system	1,034	1,519	446	326	146	212	652	4,335
Diseases of respiratory system	1,895	2,050	710	415	176	225	688	6,159
Diseases of digestive system	1,838	2,063	642	386	263	142	587	5,921
Diseases of lymphatic system and ductless glands	19	27	18	8	..	3	14	89
Diseases of urinary system	574	637	175	131	31	57	219	1,824
Diseases of organs of generation	44	54	20	13	2	2	24	159
Diseases of parturition	168	121	55	30	6	17	77	474
Diseases of organs of locomotion	33	67	14	15	3	7	25	164
Diseases of integumentary system.	47	56	25	6	2	5	23	164
Total	7,323	8,096	2,679	1,772	750	897	3,061	24,578
Violence—								
Accident or negligence	1,135	826	537	221	128	123	513	3,483
Homicide	43	41	14	8	1	1	5	113
Suicide	182	116	70	31	25	13	70	507
Execution	1	1	....	..	1	....	..	3
Violent deaths not classified	6	..	....	..	..	....	..	6
Total	1,367	984	621	260	155	137	588	4,112
Ill-defined and not specified causes	843	799	83	273	228	121	263	2,610
Grand Total	15,839	15,714	5,645	4,038	2,020	1,901	6,432	51,589

* Exclusive of Northern Territory.

A more detailed tabulation of the causes of death is beyond the scope of this work ; but two constitutional diseases merit special attention, namely, phthisis and cancer. The deaths from phthisis in 1896 numbered no less than 3,926, or at the rate of 91·82 per 100,000 of the population. Victoria had a very much higher rate than any of the other provinces, the deaths from phthisis in that colony representing 121·19 per 100,000 inhabitants, as compared with 95·21 in Queensland—

the colony with the next highest rate. The figures for each of the provinces in 1896 are given below :—

Colony.	Males.	Females.	Persons.	
			Total Deaths.	Per 100,000 of population
New South Wales	613	414	1,027	79·75
Victoria	824	604	1,428	121·19
Queensland	317	127	444	95·21
South Australia*	153	155	308	87·01
Western Australia	.....	.....	83	69·40
Tasmania	49	64	113	69·12
New Zealand	279	244	523	74·03
Australasia*	.....	.....	3,926	91·82

* Exclusive of Northern Territory.

Victoria, also, had the highest rate of deaths from cancer, namely, 66·96 per 100,000 of the population ; and Western Australia the lowest —25·09 for 100,000 inhabitants ; with Queensland next, with a rate of 39·24. The total number of deaths from cancer in each colony in 1896, with the rate per 100,000 inhabitants, is given below :—

Colony.	Males.	Females.	Persons.	
			Total Deaths.	Per 100,000 of population
New South Wales	327	294	621	48·22
Victoria	422	367	789	66·96
Queensland	107	76	183	39·24
South Australia*	98	88	186	52·55
Western Australia	.....	.....	30	25·09
Tasmania	49	46	95	58·11
New Zealand	205	184	389	55·07
Australasia*	.....	.....	2,293	53·63

* Exclusive of Northern Territory.

In comparison with the other colonies, Victoria, however, had a very small rate of mortality from diarrhœal diseases, namely, 45·66 per 100,000 of population, as compared with 79·21 per 100,000 in New South Wales, 88·13 in Queensland, 71·76 in South Australia, and 107·87 in Western Australia. Tasmania had the very low rate of 29·36, and New Zealand was only slightly higher than Victoria, namely, 47·28 per 100,000 inhabitants. In fatal accidents, also, Victoria compared favourably with the other provinces, its number of deaths from this cause in 1896 representing 70·10 per 100,000 of the population, as

compared with 115·15 in Queensland, 107·03 in Western Australia, 88·14 in New South Wales, and 75·24 in Tasmania. In New Zealand the rate was 72·62; while in South Australia it was even less than in Victoria, namely, 62·43 per 100,000 inhabitants.

Particulars relative to suicide will be found in the chapter headed "Social Condition."

Marriages.

The number of marriages and the marriage-rate per thousand of the population for each colony during the year 1897 are shown below :—

Colony.	Marriages.	Marriage Rate.
New South Wales	8,813	6·72
Victoria	7,454	6·34
Queensland	2,894	6·05
South Australia	1,953	5·40
Western Australia	1,659	11·06
Tasmania	1,052	6·22
New Zealand	4,928	6·83
Australasia	28,753	6·58

The number of marriages in each colony and in the whole of Australasia, in quinquennial periods from 1861 to 1895, and in the two years 1896–97, was as follows :—

Colony.	1861–65.	1866–70.	1871–75.	1876–80.	1881–85.	1886–90.	1891–95.	1896–97.
New South Wales	16,920	18,271	21,210	25,904	35,737	38,671	39,924	17,208
Victoria	22,237	22,902	24,368	25,416	33,589	42,832	37,717	15,079
Queensland	3,689	4,648	6,276	7,466	11,632	15,271	13,526	5,717
South Australia	6,226	6,435	7,472	10,632	12,379	10,334	10,686	4,136
Western Australia	765	828	835	978	1,112	1,495	2,332	2,736
Tasmania	3,340	3,143	3,290	4,087	5,005	4,796	4,524	2,016
New Zealand	7,240	9,955	12,050	16,220	18,102	18,097	20,210	9,771
Australasia	60,417	66,182	75,501	90,753	117,556	131,496	128,919	56,663

The average marriage-rates for each colony during the same periods are given below. The table shows the ratio of marriages to population; to ascertain the ratio of persons married it is necessary to double the figures :—

Colony.	1861–65.	1866–70.	1871–75.	1876–80.	1881–85.	1886–90.	1891–95.	1896–97.
New South Wales	9·04	8·04	7·77	7·82	8·46	7·47	6·61	6·62
Victoria	7·81	6·86	6·38	6·02	7·37	8·13	6·46	6·40
Queensland	13·51	9·02	8·75	7·30	8·64	8·45	6·33	6·05
South Australia	9·02	7·45	7·64	8·83	8·42	6·70	6·28	5·74
Western Australia	8·92	7·53	6·48	6·99	7·06	7·16	7·00	10·15
Tasmania	7·30	6·35	6·39	7·51	8·18	7·00	5·87	6·06
New Zealand	10·39	9·00	8·05	7·60	6·85	6·00	6·11	6·84
Australasia	8·73	7·61	7·27	7·28	7·84	7·43	6·41	6·55

During the five years ended 1895 the marriage-rate fell considerably in Australasia. With the exception of New Zealand it was lower in every colony than during the preceding quinquennial period, and lower everywhere than during the five years 1881–85. This is another proof of the truth of the oft-repeated statement that commercial depression always exerts an adverse influence on the marriage-rate. An improvement took place during the two years 1896–97 in New South Wales, Western Australia, Tasmania, and New Zealand ; while the rate fell still lower in Victoria, Queensland, and South Australia. The abnormal rise in the case of Western Australia is what might be expected from the large number of men whom the industrial activity in that colony has placed in a position to take upon their shoulders the responsibility of a household.

A comparison of the marriage-rate of Australasia with the rates of other countries, where the social conditions are essentially different, is not of much value, and therefore is not given here.

Particulars relative to divorce in the Australasian colonies will be found in the chapter headed "Social Condition."

Native Races.

At the census of 1891 only 38,879 aborigines were enumerated, of whom 8,280 were in New South Wales, 565 in Victoria, 23,789 in South Australia, and 6,245 in Western Australia. The figures relating to New South Wales and Victoria included all aborigines living in those provinces, but the returns from the other colonies were very imperfect. The aborigines of Tasmania are extinct, but the Tasmanian census of 1891 enumerated 139 half-castes, who were included in the general population. It has been asserted that there are some 70,000 aborigines in Queensland, but this is a very crude estimate, and may be far wide of the truth. In the case of South Australia, a large number of the aborigines in the Northern Territory are entirely outside the bounds of settlement, and it seems probable that they are as numerous in that colony as in Queensland. The census of Western Australia included only those aboriginals in the employment of the colonists, and as large portions of this, the greatest in area of all the Australasian colonies, are as yet unexplored, it may be presumed that the number of aborigines enumerated was very far short of the total in the colony. Altogether, the aboriginal population of the continent may be set down at something like 200,000.

The original inhabitants of New Zealand, or Maoris, as they are called, are quite a different race from the aborigines of Australia. They are gifted with a considerable amount of intelligence, are quick at imitation, and brave even to rashness. According to the census

of 1881 they numbered 44,097; but like the Australian aborigines they appear to be decreasing in number, for the census of 1886 enumerated only 41,432; that of 1891, 41,993; and that of 1896, 39,854, namely, 21,673 males and 18,181 females. In the 1896 figures are included 3,503 half-castes living as members of Maori tribes (1,944 males and 1,559 females), and 20 Morioris at Chatham Islands (11 males and 9 females). Half-castes to the number of 2,259 (1,123 males and 1,136 females), living with Europeans at the time of the census, were enumerated as Europeans. It is said that when the colonists first landed in New Zealand the number of Maoris was fully 120,000, but this, like all other estimates of aboriginal population, is founded on very imperfect information.

Alien Races.

At the census of 1891 the Chinese and half-caste Chinese in the whole group of colonies numbered 42,521, distributed as follows:—

New South Wales	14,156
Victoria	9,377
Queensland	8,574
South Australia	3,997
Western Australia	917
Tasmania	1,056
New Zealand	4,444
Australasia	42,521

Since 1880 it has been deemed expedient by the Governments of the colonies to enact prohibitive laws against the immigration of Chinese, and their migration from one colony to another. For several years a poll-tax of £10 was imposed, but now, in New South Wales, in accordance with the most recent legislation on the subject, masters of vessels are forbidden under a heavy penalty to bring more than one Chinese to every 300 tons, and a poll-tax of £100 is charged on landing. In Victoria, Queensland, and South Australia no poll-tax is imposed, but masters of vessels may only bring one Chinese to every 500 tons burden. The Western Australian Act was similar to that in the three last-named colonies until recently, but has now been superseded by the Coloured Immigrants Restriction Act. Tasmania allows one Chinese passenger to every 100 tons, and imposes a poll-tax of £10. In New Zealand an Act similar to the Tasmanian Act was in force until 1896, when the poll-tax was raised to £100, and the number of passengers restricted to one for every 200 tons burden. These stringent regulations have had the effect of greatly restricting the influx of this undesirable class of immigrants; but it is to be feared that the census of 1901 will disclose the fact that the Restriction Acts have not been so effectual in shutting out the Chinese from Australasia as the shipping returns of the colonies would lead one to suppose.

The only other alien race which the census of 1891 disclosed to be present in large numbers in Australasia were the Polynesians in Queensland, where they numbered 9,428. Since that time, however, there has been an influx of Hindoos and other eastern races sufficiently large to cause a feeling of uneasiness amongst the colonists, and in some of the colonies Parliament dealt with the evil by passing legislation which, in the main, meted out to these immigrants the treatment accorded to the Chinese. But a very large proportion of the Asiatics whose entrance into the colonies it was desired to stop were British subjects, and the Imperial Government refused to sanction any measure directly prohibiting in plain terms the movement of British subjects from one part of the empire to another. Eventually, the difficulty was overcome by the application of an educational test to the coloured races seeking admission to the colonies, whereby they are required to write out in some European language an application to the Colonial Secretary. This provision is taken from an Act in operation in Natal, which is said to have been effectual in that colony. An Act applying the educational test has been in force in Western Australia since the beginning of 1898; a similar Act has been passed in New South Wales, and will come into operation on the 1st December of the same year; while the Tasmanian Parliament is at present considering a measure of the same kind; and no doubt the other colonies will move in the same direction at an early date.

NATURALISATION.

The number of persons naturalised in Australasia during 1896 was 1,137; of these, nearly one-third took out papers of naturalisation in New Zealand, one-fourth in Queensland, and nearly one-sixth in each of the two colonies of New South Wales and Victoria. The figures for Western Australia and Tasmania are small. The following are the returns for each colony:—

Colony.	Germans and other German-speaking nations.	Scandinavians.	Chinese.	Others.	Total.
New South Wales ...	99	30	.....	55	184
Victoria	93	20	.....	61	174
Queensland	171	65	1	38	275
South Australia	90	14	.....	18	122
Western Australia ...	6	4	.....	12	22
Tasmania	5	1	1	1	8
New Zealand.....	119	150	17	66	352
Australasia ...	583	284	19	251	1,137

Cities and Towns.

The progress of the chief cities of Australasia has been no less remarkable than that of the colonies themselves, and has no parallel among the cities of the old world. Even in America the rise of the great cities has been accompanied by a corresponding increase in the rural population, but in these colonies, perhaps for the first time in history, is presented the spectacle of magnificent cities growing with marvellous rapidity, and embracing within their limits one-third of the population of the colonies of which they are the seat of government. The abnormal aggregation of the population into their capital cities is a most unfortunate element in the progress of the colonies, and one which seems to become every year more marked.

The increase in the population of the chief cities of Australasia and the estimated numbers of their inhabitants at the various census periods are shown in the following table, which illustrates the remarkable progress referred to :—

City.	1841.	1851.	1861.	1871.	1881.	1891.
Sydney	29,973	53,924	95,789	137,776	224,939	383,283
Melbourne	4,479	23,143	139,916	206,780	282,947	490,896
Brisbane	*829	2,543	6,051	15,029	31,109	93,657
Adelaide	†8,480	‡14,577	18,303	42,744	103,864	133,252
Perth	.....	.....	.....	5,244	5,822	8,447
Hobart	.....	.....	19,449	19,092	21,118	33,450
Wellington.....	.....	.....	.....	7,908	20,563	33,224

* In 1846. † In 1840. ‡ In 1850.

The aggregation of population is most marked in the case of Melbourne, but Adelaide and Sydney are also conspicuous. The proportion of population in each capital compared with that of the whole colony is shown below for the three years 1871, 1881 and 1891 :—

City.	1871.	1881.	1891.
	per cent.	per cent.	per cent.
Sydney.....	27·34	29·93	33·86
Melbourne	28·27	32·81	43·05
Brisbane	12·51	14·57	23·79
Adelaide	23·03	37·11	41·59
Perth	20·68	19·60	16·97
Hobart	18·76	18·25	22·81
Wellington	3·08	4·20	5·30

The percentage of New Zealand population resident in Wellington is small, but though it is the capital of the colony that city is exceeded

in population by Auckland, as well as by Dunedin and Christchurch. Still, even in the largest of these cities—Auckland—the population is not more than 8·18 per cent. of that of the whole colony.

The following is a list of the cities and towns of Australasia with a population exceeding 5,000 at the census of 1891; in all cases the suburbs are included :—

City or Town.	Population.	City or Town.	Population.
New South Wales—		Queensland—*continued*—	
Sydney	383,283	Gympie	8,449
Newcastle	50,705	Ipswich	7,625
Broken Hill	19,789	Toowoomba	7,007
Parramatta	11,677	South Australia—	
Goulburn	10,916	Adelaide	133,252
Maitland	10,214	Port Adelaide	20,644
Bathurst	9,162	Western Australia—	
Albury	5,447	Perth	8,447
Orange	5,064	Fremantle	5,607
Victoria—		Tasmania—	
Melbourne	490,896	Hobart	33,450
Ballarat	46,033	Launceston	17,208
Bendigo	37,238	New Zealand—	
Geelong	24,283	Auckland	51,287
Warrnambool	6,582	Christchurch	47,846
Castlemaine	5,982	Dunedin	45,869
Stawell	5,183	Wellington	33,224
Queensland—		Invercargill	7,962
Brisbane	93,657	Napier	8,341
Rockhampton	13,380	Nelson	6,626
Maryborough	9,700	Oamaru	5,621
Townsville	8,564	Wanganui	5,011

The estimated population of the capitals of the Australasian colonies on the 31st December, 1897, was as follows :—

Sydney	417,250
Melbourne	458,610
Brisbane	105,734
Adelaide	146,125
Perth	37,929
Hobart	39,172
Wellington	44,697

Birthplaces.

One of the subjects of inquiry at the census of 1891, as at previous enumerations, was the birthplaces of the population. The result of the tabulation shows that while there are differences in the component parts of the population in the several colonies, these differences are slight, and

the great majority of the people—to the extent, indeed, of fully 95 per cent.—are of British origin. Probably the population of Australasia is more homogeneous than that of most European countries; for even in Queensland, where people of foreign descent are proportionately more numerous than in any of the other colonies, they do not amount to more than 10 per cent. of the total population. The subjoined table shows in a condensed form the results of the tabulation of the birthplaces of the population of each colony, the figures being exclusive of aborigines, and inclusive, in the case of European countries, of their colonies and possessions :—

Birthplaces.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.	Australasia.
New South Wales	725,015	19,775	17,023	2,154	555	1,180	2,833	768,535
Victoria	40,768	713,074	7,462	6,609	1,036	4,205	8,941	782,095
Queensland	10,173	2,736	176,971	405	208	203	481	191,177
South Australia	17,716	25,309	1,449	217,730	1,161	674	983	265,022
Western Australia	464	753	63	588	27,825	69	76	29,838
Tasmania	5,851	16,397	1,004	722	108	107,901	2,629	134,612
New Zealand	9,015	12,026	1,117	567	182	963	366,716	390,586
Australasia	809,002	790,070	205,089	228,775	31,075	115,195	382,659	2,561,865
England and Wales	154,229	162,907	77,187	48,821	9,812	17,443	119,284	589,683
Scotland	36,821	50,667	22,400	8,874	1,211	3,845	51,916	175,734
Ireland	75,051	85,307	43,036	14,369	3,499	5,687	47,634	274,583
United Kingdom	266,101	298,881	142,623	72,064	14,522	26,975	218,834	1,040,000
British Possessions—								
In Europe	177	131	71	296	39	14	111	839
In Asia	2,105	1,853	1,129	602	459	389	1,168	7,705
In Africa	738	1,008	240	222	90	65	340	2,703
In America	1,611	1,860	614	384	169	180	1,685	6,503
In Polynesia	298	134	12	34	2	19	105	604
Other British Possessions	4,929	4,986	2,066	1,538	759	667	3,409	18,354
Austria-Hungary	588	586	247	185	29	20	564	2,219
Belgium	181	235	35	51	4	12	115	633
Denmark	1,488	1,399	3,072	276	41	137	2,053	8,466
France	2,270	1,307	411	400	72	77	711	5,248
Germany	9,565	10,775	14,924	8,553	290	918	4,663	49,688
Italy	1,477	1,717	439	186	36	36	397	4,288
Netherlands	284	366	67	82	19	12	143	973
Portugal	249	168	41	17	10	27	205	717
Russia	1,176	1,172	311	189	71	38	419	3,376
Spain	138	227	93	29	89	17	76	669
Sweden and Norway	3,397	3,214	1,956	1,157	204	194	2,702	12,824
Switzerland	594	1,317	469	142	15	18	362	2,917
United States of America	3,379	2,905	943	386	154	221	1,683	9,671
China	13,157	8,467	8,554	3,997	914	943	4,470	40,502
Specified foreign countries	37,943	33,855	31,562	15,650	1,948	2,670	18,563	142,191
At sea	1,960	1,973	832	601	114	170	1,295	6,945
All others and unspecified	4,019	10,075	11,546	1,803	1,364	990	1,898	31,695
Total	1,123,954	1,139,840	393,718	320,431	49,782	146,667	626,658	3,801,050

A glance at this table will show that natives of the Australasian colonies formed fully two-thirds of the population, and that the great

majority of the Australasian-born population were natives of the particular colony in which they were enumerated. The percentage of the people born in the colony in which they were resident at the time of the census, of those born in the other six Australasian colonies, and of the total Australasian-born population to the total population of each colony, are shown below :—

Colony.	Percentage to Total Population of—		
	Natives of Colony of Enumeration.	Natives of other Colonies.	Australasian-born Population.
New South Wales	64·51	7·47	71·98
Victoria	62·56	6·75	69·31
Queensland	44·95	7·14	52·09
South Australia	67·95	3·45	71·40
Western Australia	55·89	6·53	62·42
Tasmania	73·57	4·97	78·54
New Zealand	58·52	2·54	61·06
Australasia	61·44	5·96	67·40

These figures show that proportionately the largest Australasian-born population is to be found in Tasmania, where more than 73 out of every 100 of the inhabitants were born in the colony, and over 78 per cent. were Australasians. In Queensland, on the contrary, very nearly half the population were natives of countries outside Australasia, and only 45 per cent. were Queenslanders by birth. The low proportion of native-born in the colony in question is no doubt accounted for by the comparatively recent settlement of much of its territory, and the encouragement given to immigrants from the United Kingdom and the Continent of Europe. It will be noticed that New South Wales has proved the most attractive of all the provinces to those born in other parts of Australasia, while New Zealand, from its isolated position and greater distance, has drawn to itself the smallest proportion of Australasian natives. The following figures set forth still more clearly the extent to which each colony is indebted for population to its neighbours :—

Colony.	Number of Natives of other six Colonies enumerated.	Number of Natives enumerated in other six Colonies.	Gain to Colony.	Loss to Colony.
New South Wales	83,987	43,520	40,467	.....
Victoria	76,996	69,021	7,975	.....
Queensland	28,118	14,206	13,912	.....
South Australia	11,045	47,292	.....	36,247
Western Australia	3,250	2,013	1,237	.....
Tasmania	7,294	26,711	.....	19,417
New Zealand	15,943	23,870	.....	7,927

In New South Wales, it will be seen, there were 83,987 natives of the other colonies, while only 43,520 natives of New South Wales had made their homes in other parts of Australasia, the result being a net gain of 40,467 persons—a very considerable proportion, seeing that several of the other provinces were originally colonised from New South Wales. On the other hand, South Australia showed a loss of 36,247 from intercolonial movements of population; Tasmania had lost 19,417; and New Zealand, 7,927. The natives of other parts of Australasia resident in Victoria very nearly balanced the number of Victorians resident in other provinces, the excess in favour of the colony in question being under 8,000. Queensland gained 13,912 from the other colonies; and Western Australia, 1,237 persons.

Next to the Australasian-born population, natives of the United Kingdom were by far the most numerous class in each colony. The following table shows the percentages of natives of England and Wales, Scotland, and Ireland to the total population of each colony :—

Colony.	Natives of—			
	England and Wales.	Scotland.	Ireland.	United Kingdom.
New South Wales.....	13·71	3·28	6·68	23·67
Victoria	14·29	4·45	7·48	26·22
Queensland.....	19·60	5·69	10·93	36·22
South Australia.....	15·24	2·77	4·48	22·49
Western Australia ...	19·71	2·43	7·03	29·17
Tasmania	11·89	2·62	3·88	18·39
New Zealand	19·04	8·28	7·60	34·92
Australasia	15·51	4·62	7·23	27·36

It was to be expected that the percentage of natives of the United Kingdom would be highest in those colonies which have introduced a large number of assisted immigrants during the last twenty years, namely, in Queensland and New Zealand, in which colonies the percentage of the native-born population is comparatively low. If the composition of the population of the United Kingdom be taken into consideration, it will be seen that Scotch and Irish colonists are proportionately much more numerous than those of English birth. The distribution of natives of the three kingdoms is very unequal in the different colonies. While natives of England are proportionately more numerous than natives of Scotland and Ireland in South Australia, Western Australia, and Tasmania; Scotsmen are most numerous in New Zealand, and Irishmen in Queensland.

The number of natives of parts of the British Empire other than the United Kingdom and Australasia enumerated in these colonies was very small, amounting only to the following percentages of the total population :—In New South Wales, 0·44 per cent.; in Victoria, 0·44 per cent.; in Queensland, 0·53 per cent.; in South Australia, 0·48 per

cent.; in Western Australia, 1·53 per cent.; in Tasmania, 0·45 per cent.; and in New Zealand, 0·54 per cent.; average for Australasia, 0·48 per cent. Natives of Canada and of the West and East Indies make up the majority of this class, which numbered only 18,354 altogether. It is not possible to give a complete tabulation of natives of foreign countries, as in some of the colonies no countries are mentioned other than those shown in the table given, the rest of the foreign-born population being bracketed together as natives of "other foreign countries." Immigrants from Germany appear to be most numerous; then follow natives of China, Sweden and Norway, the United States, Denmark, France, Italy, Russia, Switzerland, Austria-Hungary, the Netherlands, Portugal, Spain, and Belgium. Of countries not shown in the table, Greece and Asiatic Turkey would appear to have contributed most largely to the population of Australasia, though Polynesians are numerous in Queensland. The percentages to the total population of each colony of natives of Germany, of the Scandinavian Kingdoms (Sweden and Norway and Denmark), and of the total foreign-born population, are shown in the subjoined table :—

Colony.	Percentage of—		
	Germans.	Scandinavians.	Total Foreign-born Population.
New South Wales	0·85	0·43	3·38
Victoria	0·95	0·40	2·98
Queensland	3·79	1·28	8·02
South Australia	2·67	0·45	4·88
Western Australia	0·58	0·49	3·91
Tasmania	0·63	0·23	1·82
New Zealand	0·74	0·76	2·97
Australasia	1·31	0·56	3·74

It will be seen that both Germans and Scandinavians are proportionately most numerous in Queensland, where together they amount to more than 5 per cent. of the population. Germans are also very numerous in South Australia, and Scandinavians in New Zealand.

Conjugal Condition.

At the Hobart Census Conference it had been decided to tabulate the conjugal condition of the people under the heads of "Never married," "Married," "Widowed," and "Divorced"; but this decision was not adhered to by South Australia and New Zealand, where the divorced were probably included under the heading of unmarried. For the sake of comparison a similar classification has therefore been made in the tabulation of the other colonies. The people who returned themselves as "divorced" on the census schedules of New South Wales numbered 178 males and 126 females—total, 304; in Victoria, 110 males and 86 females—total, 196; in Queensland, 16 males and 7 females—total, 23

in Western Australia, 3 males and 3 females—total, 6; and in Tasmania, 25 males and 6 females—total, 31. Considering that during the five years preceding the taking of the census 210 decrees for the dissolution of marriage had been granted in New South Wales, it is reasonable to assume that the figures quoted for that colony understate the truth, no doubt owing to the reluctance on the part of many people whose marriage bonds had been severed to return themselves as "divorced" in the census schedules, and the same remark applies to the other colonies.

The following table shows the number of unmarried, married, and widowed people in each colony, those whose conjugal condition was unspecified on the schedules having been proportionately distributed :—

Conjugal Condition.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.	Australasia.
MALES—								
Unmarried	424,464	408,566	161,308	114,066	21,648	52,630	234,315	1,416,997
Married	166,634	170,954	57,963	48,932	7,266	22,488	90,754	564,991
Widowed	16,905	18,569	4,508	3,803	893	2,442	7,808	54,928
Total	608,003	598,089	223,779	166,801	29,807	77,560	332,877	2,036,916
FEMALES—								
Unmarried	324,504	335,098	105,632	96,891	12,706	43,755	190,758	1,109,344
Married	165,648	173,749	57,610	48,295	6,383	21,406	90,919	564,010
Widowed	25,799	32,904	6,697	8,444	886	3,946	12,104	90,780
Total	515,951	541,751	169,939	153,630	19,975	69,107	293,781	1,764,134
MALES AND FEMALES—								
Unmarried	748,968	743,664	266,940	210,957	34,354	96,385	425,073	2,526,341
Married	332,282	344,703	115,573	97,227	13,649	43,894	181,673	1,129,001
Widowed	42,704	51,473	11,205	12,247	1,779	6,388	19,912	145,708
Total	1,123,954	1,139,840	393,718	320,431	49,782	146,667	626,658	3,801,050

From the foregoing figures it will be seen that unmarried males are largely in excess of unmarried females in each colony. The number for each colony and the percentage of unmarried females to unmarried males are shown in the following table :—

Colony.	Excess of Unmarried Males over Unmarried Females.	Percentage of Unmarried Females to Unmarried Males.
New South Wales	99,960	76·45
Victoria	73,468	82·02
Queensland	55,676	65·48
South Australia	17,175	84·94
Western Australia	8,942	58·69
Tasmania	8,875	83·14
New Zealand	43,557	81·41
Australasia	307,653	78·29

The percentage is particularly low in those colonies which have attracted much population from the other provinces, as New South Wales, Queensland, and Western Australia; while it is near the average in Victoria and New Zealand, which have neither gained nor lost population to any great extent; and it is considerably above the average in South Australia and Tasmania, whence a great amount of emigration to the other colonies has taken place. This fact favours the supposition that the movement of population chiefly consisted of young unmarried males attracted to the other colonies by the hope of bettering their condition.

The numbers of married males and females are fairly equal in all the colonies, the males preponderating everywhere except in Victoria and New Zealand; there must, therefore, have been an emigration of married males from these two provinces.

Amongst the widowed, females largely outnumber males, as was to be expected from the higher death-rate and the proportionately larger number of males re-married. Western Australia, however, shows a slight excess of widowers over widows. The following table shows for each colony the proportion of unmarried, married, and widowed males to total males; of unmarried, married, and widowed females to total females; and of unmarried, married, and widowed persons to total population:—

Percentage of—	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.	Australasia.
MALES—								
Unmarried	69·81	68·31	72·08	68·38	72·63	67·86	70·39	69·57
Married	27·41	28·58	25·90	29·34	24·38	28·99	27·26	27·74
Widowed	2·78	3·11	2·02	2·28	2·99	3·15	2·35	2·69
FEMALES—								
Unmarried	62·89	61·86	62·16	63·07	63·61	63·31	64·93	62·88
Married	32·11	32·07	33·90	31·44	31·95	30·98	30·95	31·97
Widowed	5·00	6·07	3·94	5·49	4·44	5·71	4·12	5·15
PERSONS—								
Unmarried	66·64	65·24	67·80	65·84	69·01	65·72	67·83	66·46
Married	29·56	30·24	29·35	30·34	27·42	29·93	28·99	29·70
Widowed	3·80	4·52	2·85	3·82	3·57	4·35	3·18	3·84

SICKNESS AND INFIRMITY.

Inquiries were made in the census schedules respecting the number of persons suffering from sickness and infirmity, but there is reason to believe that, in some of the colonies at least, the way in which the column was filled in was unsatisfactory. The figures for New South Wales, Victoria, and South Australia may be compared throughout, as the classification adopted was practically the same, and to a certain extent this also holds good of the Western Australian and Tasmanian figures. The returns for Queensland are made in a somewhat indefinite way; and in

New Zealand half the number of persons returned as sick and infirm includes all ages, while the other half only includes the population of 15 years and over. The following table shows the results of the tabulation for each of the colonies :—

Sickness and Infirmity.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand
Sickness—							
Paralysis	851	1,097	*	300	*	*	468
Epilepsy	339	420	*	138	18	37	232
Leprosy	15	3	*	3	*	*	*
Other and undefined	10,117	13,127	*	3,620	487	2,579	†4,404
Total	11,322	14,647	2,969	4,061	505	2,616	5,104
Accidents	1,459	1,668	777	432	62	152	‡679
Deaf and dumb	383	364	154	234	11	54	166
Dumb only	9	*	*	*	*	*	*
Deaf only	1,348	627	*	101	*	*	268
Blindness	741	995	199	247	54	165	274
Lunacy	3,129	3,770	1,104	852	129	383	1,798
Idiocy	286	355	*	84	7	46	128
Crippled	1,775	346	*	186	*	*	979
Lost a limb	635	754	*	251	35	*	*
Lost sight of an eye	1,164	1,157	*	339	79	*	*
Total	22,251	24,683	5,203	6,787	882	3,416	9,396

* Included under more general heading. † Of this number, 4,130 persons refer to the population over 15 years only, while 274 persons refer to the whole population. ‡ Population over 15 years only.

Habitations.

At the census of 1891 inquiry was made on the householders' schedules respecting the dwellings of the population. The information sought was in respect to whether a building was occupied, unoccupied, or in course of construction; the material of which it was built, and the number of rooms which it contained. The tabulation was not made with the same degree of completeness in all the colonies; but as far as comparative figures can be given they are shown below :—

Class of Dwelling.	New South Wales.	Victoria	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.
Occupied	197,408	217,895	78,429	59,834	10,221	26,585	119,766
Unoccupied	16,166	15,846	2,224	3,818	236	1,588	9,558
Being built	1,255	1,693	44	235	73	189	425
Stores, offices, and public buildings	8,368	264	*	*	*	244	*
Inhabited huts and dwellings with canvas roofs	18,794	5,862	*	*	*	1,195	4,085
Total	241,991	241,560	80,697	63,887	10,530	29,801	133,834

* Included under more general heading.

The materials of which the dwellings in each colony were constructed are shown in the following table, as far as the particulars are available:—

Material.	New South Wales.	Victoria	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand
Brick or stone	90,456	69,545	....	50,723	6,087	8,452	5,697
Wood, iron, or lath and plaster	130,363	154,843	....	11,519	2,388	19,231	116,801
Slabs, bark, mud, &c	*	4,841	....	*	306	595	4,286
Canvas, linen, calico, &c	18,794	5,858	....	889	1,552	1,214	4,085
Other materials	....	....	....	*	3	....	1,551
Unspecified materials	2,378	6,473	....	756	194	309	1,414
Total	241,991	241,560	80,697	63,887	10,530	29,801	133,834

* Included in previous line.

The number of rooms is given below for all houses, whether occupied or unoccupied, except in the case of New South Wales and New Zealand, where the figures given refer only to occupied dwellings :—

Dwellings, with—	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand
One room	24,876	28,497	....	1,948	2,075	2,469	11,528
Two rooms	16,137		....	7,397	1,612	4,092	11,030
Three and four rooms	65,920	156,976	....	28,256	2,855	11,627	41,934
Five and six rooms	64,342		....	15,911	1,440	5,880	32,868
Seven to ten rooms	32,275	36,944	....	9,614	1,856	5,413	24,968
Eleven to fifteen rooms	7,371	7,061	....		318		
Sixteen to twenty rooms	1,912	1,673	....		92		
More than twenty rooms	1,160	1,226	....		47		
Number of rooms unspecified	1,947	9,183	....	761	235	320	1,523
Total	215,940	241,560	80,697	63,887	10,530	29,801	123,851

In Queensland the habitations were enumerated under the Quinquennial Census Act, which does not provide for a statement either of the materials of which houses are constructed or of the number of rooms which they contain. From the foregoing figures it will be seen that in Australasia there are nearly $5\frac{1}{4}$ persons to every occupied house.

RELIGION.

THE progress of all matters relating to denominational Religion since the early years of Australasian settlement has been steady and remarkable. For the first fifteen years after the foundation of the colony of New South Wales, only a single denomination was recognised by Government or possessed either minister or organisation—the Established Church of England. In those days the whole of Australasia was ecclesiastically within the diocese of the Bishop of Calcutta, of which it formed an Archdeaconry; this continued until 1836, when the bishopric of Australia was constituted, and the Rev. William Grant Broughton, D.D. (formerly Archdeacon), was consecrated the first Bishop. In 1841 the bishopric of New Zealand was established, and in 1842 that of Tasmania. Considerable changes took place in 1847, when the dioceses of Melbourne, Adelaide (including South Australia and Western Australia), and Newcastle (including the northern portion of what is now New South Wales, and the whole of Queensland) were established, and the Bishop of Australia was styled Bishop of Sydney and Metropolitan of Australia and Tasmania. In 1857 the diocese of Perth was formed out of that of Adelaide, and in 1859 the diocese of Brisbane out of that of Newcastle; in 1863 the bishopric of Goulburn was separated from Sydney; in 1867 the bishopric of Grafton and Armidale was formed out of part of the diocese of Newcastle; in 1869 Bathurst was separated from Sydney; in 1875 Victoria was divided into the two dioceses of Melbourne and Ballarat; in 1878 the bishopric of Northern Queensland was established, with Townsville as seat of its Bishop; in 1884 the diocese of Riverina was formed out of parts of the dioceses of Bathurst and Goulburn; and in 1892 parts of the bishoprics of Brisbane and Northern Queensland were formed into the new diocese of Rockhampton. While the six dioceses of New South Wales were united under a provincial constitution, with the Bishop of Sydney as Metropolitan, no such union existed in Victoria or Queensland, and the decision of the Lambeth Conference of 1897, granting the title of Archbishop to Colonial Metropolitans applied, therefore, only to Sydney, whose Bishop thereby became Archbishop of Sydney.

Each colony preserves its autonomy in church matters, but the Archbishop of Sydney is nominal head or Primate within the boundaries of Australia and Tasmania. In 1872 the ties between the churches in the various colonies under the jurisdiction of the Primacy were strengthened by the adoption of one common constitution. A general synod of representatives of each of these colonies meets in Sydney every five years to discuss Church affairs in general. New Zealand is excluded from this amalgamation, and possesses a Primacy of its own. As already stated, a Bishop of New Zealand was appointed in 1841.

After various changes the constitution of the Church in New Zealand was finally settled in 1874, when the whole colony was divided into the six dioceses of Auckland, Waiapu (Napier), Wellington, Nelson, Christchurch, and Dunedin. After the departure of Bishop Selwyn, who has been the only Bishop of New Zealand, the Primacy was transferred to the see of Christchurch, where it remained until 1895. In that year the Bishop of Auckland was elected Primate of New Zealand. The missionary Bishop of Melanesia, whose head-quarters are at Norfolk Island, is under the jurisdiction of the New Zealand primacy. At present, therefore, there are twenty-one bishops in the colonies, including the Bishop of Melanesia, but excluding assistant bishops. The Synodical system of Church Government, by means of a legislative body, consisting of the clergy and representatives of the laity, prevails throughout Australasia, both in the individual colonies and as a group.

In 1803 a grudging recognition was extended to Roman Catholics, one of whose chaplains was for some time placed on the Government establishment; but it was not until 1820 that any regular provision was made for the due representation of the clergy of this body. Until 1834 the Roman Catholics of Australia and Tasmania were under the jurisdiction of the Bishop of Mauritius (the Rev. Dr. Ullathorne being Vicar-General from 1830 to 1834), but in that year Sydney was constituted a see, and the Rev. John Bede Polding, D.D., was consecrated Bishop, with jurisdiction over the whole of the Continent and Tasmania. In 1842 Hobart was established as a separate diocese, and Sydney became an archiepiscopal see. The diocese of Adelaide dates from 1843, that of Perth from 1845, and those of Melbourne, Maitland, Bathurst, Auckland, and Wellington from 1848. During this year a diocese was established in the Northern Territory of South Australia, which since 1888 has been designated the diocese of Port Victoria and Palmerston. The bishopric of Brisbane was founded in 1859, and that of Goulburn in 1864. In 1867 the Abbey-nullius of New Norcia (Western Australia) was established. The dioceses of Armidale and Auckland date from 1869, and those of Ballarat and Sandhurst from 1874. In 1876 Melbourne became an archdiocese, and Cooktown was formed into a Vicariate-Apostolic. Other changes took place in Queensland in 1882, when the diocese of Rockhampton was founded, and in 1884, when the Vicariate-Apostolic of British New Guinea (with residence at Thursday Island) was established. In 1885 the Archbishop of Sydney was created a cardinal, and placed at the head of the Roman Catholic Church throughout Australasia. Following upon this appointment great alterations took place in the arrangement of dioceses in 1887, when the new dioceses of Grafton, Wilcannia, Sale, Port Augusta, and Christchurch, and the Vicariates-Apostolic of Kimberley and Queensland (the latter with jurisdiction over all the aborigines of the colony) were established, and Adelaide, Brisbane, and Wellington became archdioceses. In 1888 Hobart was also made an archiepiscopal see; and a new see was established in 1898 at Geraldton, in Western Australia. At

the present time there are six archbishops, sixteen bishops, three vicars-apostolic, and one abbot-nullius, or in all twenty-six heads of the Church with episcopal jurisdiction, irrespective of the Vicariate-Apostolic of British New Guinea and of several auxiliary and coadjutor-bishops.

Amongst the earliest free colonists who settled in the Hawkesbury district of New South Wales was a small party of Presbyterians, and one of the first places of worship erected in the colony was put up in 1810 at Portland Head by their voluntary exertions. Services were conducted there for years before any ordained minister of the denomination reached New South Wales; indeed, it was not until 1823 that the Rev. Dr. Lang and the Rev. Archibald Macarthur, the first Presbyterian ministers in Australasia, arrived in Sydney and Hobart respectively. The Presbyterian Churches of New South Wales, Victoria (with which the Presbyterian Church of Western Australia is connected), Queensland, South Australia, and Tasmania, are united in a Federal Assembly which meets every year in rotation in the capital cities of the colonies mentioned. New Zealand is not included in this federation, and the Presbyterian Church in that colony is divided into the Presbyterian Church of New Zealand and the Presbyterian Church of Otago and Southland. Besides the churches mentioned, there are several small bodies of Presbyterians unconnected with the larger churches, such as the Presbyterian Church of Eastern Australia in New South Wales, and the Free Church in Victoria. The church in each colony, however, acts independently as regards local ecclesiastical administration, and preserves its autonomy in respect of funds and property.

The first Wesleyan minister came to New South Wales in 1815, but it was not until 1821 that a Wesleyan place of worship was erected in Sydney, and it was even later before the denomination was allowed to share in the Government provision for religion. The first Wesleyan Church in Hobart was established in 1820. From 1815 to 1855 the Wesleyan Church in the colonies was regarded as a mission of the British Wesleyan Church, and from 1855 to 1873 it was affiliated to the British Wesleyan Conference; but in the latter year it was constituted into a separate and independent Conference as the Australasian Wesleyan Methodist Church. At present the Church is divided into five Conferences, viz., New South Wales, Victoria and Tasmania, Queensland, South Australia and Western Australia, and New Zealand. These Conferences meet annually, while a General Conference is held at triennial periods within the boundaries of each annual Conference in the order decided upon. At the General Conference held in Auckland on the 10th November, 1897, it was enacted that Western Australia should be constituted a separate Conference, the division to take place and the first Conference to be held in the year 1900.

A Congregational minister arrived in Sydney as early as 1798; and in Hobart the Congregational Church was established in 1830. At present there exists a separate Congregational Union in each of the seven colonies. Federal meetings have been held, and a Congregational

Union of Australasia has been established. The first meeting of this body was held at Wellington, New Zealand, in 1892. It is intended to hold similar gatherings from time to time in the capital cities of the various colonies.

The Baptist Church in the colonies dates from a much later period, the establishment of the first four Baptist Churches being as follows :— Sydney, 1834; Launceston, 1839; Adelaide, 1840 ; and Melbourne, 1841. Churches were established in Auckland in 1852, in Brisbane in 1855, and in Perth in 1895. It is stated that in 1898 there were 215 Baptist churches in the colonies, more than half of which were in Victoria and South Australia.

Leaving out of consideration some churches with but a small number of adherents, the Salvation Army may be said to be the youngest of the denominations in Australasia. It commenced operations in South Australia towards the close of the year 1880, and in 1882 officers were despatched from Adelaide to Victoria, New South Wales, and Tasmania, for the purpose of organising corps in those colonies. New Zealand was invaded in 1883, Queensland in 1886, and Western Australia in 1891. The head-quarters of the Army are in Melbourne, and its head in Australasia ranks as a Commissioner. He is directly responsible to General Booth, and controls the officers commanding in each of the seven colonies, who bear the rank of colonel or brigadier. Each colony is divided into districts, which are placed in the charge of superior officers ; and each of these districts is subdivided into local corps under subaltern officers, assisted by secretaries, etc. These subaltern officers are responsible to the officers commanding their division, and the latter to the colonel or brigadier in charge of the Army of the whole colony.

In the eyes of the State all religions are equal in Australasia, and State aid to the denominations has now been abolished in all the colonies of the group. South Australia, in 1851, was the first colony to withdraw such aid, after it had been in force only three years ; and Queensland, in 1860, shortly after the assembling of the first Parliament, abolished the system inherited from the mother colony, and limited future payments to the clergy then actually in receipt of State aid. New South Wales passed a similar Act in 1862, and the expenditure on this account, which in that year was over £32,000, had fallen in 1896–7 to £6,727. The other colonies of the group, with the exception of Western Australia, subsequently abolished State aid, Victoria being the last of them to withdraw denominational grants, namely, in 1875. In Western Australia the system lasted until 1895, when it was abolished from that year ; and, in lieu of the annual grants, two sums of £17,715 each were distributed amongst the religious bodies affected, namely, the Anglicans, Roman Catholics, Wesleyans, and Presbyterians, on the 1st October, 1895, and 1st July, 1896.

The only denominations which ever received State aid were the Church of England, Roman Catholics, Presbyterians, and Wesleyans ;

other denominations to which it was tendered refusing to accept it. The greater portion of the inhabitants belonged to these four persuasions, and the enormous increase of population during the last forty-five years has not in any considerable degree altered this condition of things, though in some colonies different bodies of Christians have represented a larger proportion of the people than in others. Thus, in New South Wales, Queensland, and Victoria the proportion of Roman Catholics has been, and still is, larger than in the other colonies, while in New Zealand it is much smaller. Presbyterians bear a greater proportion to the population in New Zealand than in any other colony, while Wesleyans and Lutherans are more numerous in South Australia than elsewhere. The adherents of the Church of England predominate numerically in all the colonies.

The following tables show the number of adherents to the principal denominations in each colony at the census enumerations of 1871, 1881, and 1891 :—

Religious Denominations.	Year.	New South Wales.	Victoria.	Queensland.	South Australia.	West'n Australia.	*Tasmania.	New Zealand.	Australasia.
Church of England	1871	229,243	251,838	43,764	50,286	14,955	54,404	107,241	751,731
	1881	342,359	299,652	73,920	75,812	16,263	59,785	203,333	1,071,124
	1891	502,983	401,375	142,555	89,271	24,768	73,169	250,945	1,485,066
Roman Catholics	1871	147,627	170,620	31,822	28,271	7,282	22,657	35,608	443,887
	1881	207,606	203,480	54,376	42,628	8,413	23,055	68,984	608,542
	1891	286,915	248,585	92,765	47,179	12,602	25,800	87,272	801,118
Presbyterians	1871	49,122	112,983	15,373	11,380	541	9,296	63,624	262,819
	1881	72,545	132,591	22,609	17,917	1,004	9,133	113,108	368,907
	1891	109,383	166,911	45,639	18,206	1,997	9,756	141,477	493,369
Wesleyan and other Methodists	1871	39,566	90,026	7,206	35,009	1,405	7,371	22,004	202,587
	1881	64,352	108,393	14,351	52,788	2,084	10,955	46,282	299,205
	1891	110,110	148,429	30,868	60,857	4,595	17,150	62,346	434,355
Congregationalists	1871	9,253	18,191	2,647	6,571	902	4,031	3,941	45,536
	1881	14,328	19,878	4,764	9,908	1,262	4,066	6,699	60,905
	1891	24,112	22,099	8,571	11,882	1,573	4,501	6,685	79,423
Baptists	1871	4,151	16,311	2,897	9,263	55	955	4,732	38,364
	1881	7,307	20,373	5,583	13,979	†....	1,836	11,476	60,554
	1891	13,102	27,878	10,256	17,547	283	3,285	14,825	87,176
Lutherans	1871	†....	†....	†....	†....	†....	†....	†....	†....
	1881	4,836	11,153	16,889	19,617	†....	†....	5,773	58,268
	1891	7,940	15,585	23,383	23,328	216	421	5,616	76,439
Salvation Army	1871	....	....	....	....	....	....	....	....
	1881	†....	†....	†....	†....	†....	†....	†....	†....
	1891	10,312	13,519	4,021	4,356	4	1,216	9,383	42,811
Hebrews	1871	2,395	3,571	291	501	63	238	1,262	8,321
	1881	3,266	4,330	457	762	†....	†....	1,536	10,351
	1891	5,484	6,459	809	840	129	84	1,463	15,268
Mahometans, Buddhists, Confucians, &c.	1871	7,455	17,775	3,188	2,747	†....	4	2,612	33,781
	1881	9,345	11,292	16,871	4,151	145	†....	4,936	46,740
	1891	10,790	6,987	17,484	4,255	1,804	968	3,928	46,166
All other Religions	1871	9,223	34,688	10,215	31,645	150	2,829	5,877	94,627
	1881	11,827	36,149	2,347	28,061	184	6,875	12,499	97,942
	1891	28,730	59,249	12,906	27,724	1,215	5,143	26,088	161,055
Object to state Religion and Unspecified	1871	5,946	15,525	2,701	9,453	†....	†....	9,492	43,117
	1881	13,697	15,055	1,358	14,242	353	†....	15,307	60,012
	1891	14,093	22,814	4,511	14,986	596	5,174	16,630	78,804
Total	1871	503,981	731,528	120,104	185,026	25,353	101,785	256,393	1,924,770
	1881	751,468	862,346	213,525	279,865	29,708	115,705	489,933	2,742,550
	1891	1,123,954	1,139,840	393,718	320,431	49,782	146,667	626,658	3,801,050

* As religions were not enumerated at the Tasmanian Census of 1881, the figures given for that year have been estimated. † Included in "All other Religions."

The figures for 1891 are exclusive of aborigines, while in 1871 and 1881 a few civilised aborigines were included in the returns for New South Wales and Victoria.

The following table shows the proportions held by the principal denominations to the total population of each colony at the enumerations of 1871, 1881, and 1891 :—

	Colony.	Church of England.	Roman Catholics.	Presbyterians.	Wesleyan and other Methodists.	Congregationalists.	Baptists.	All Others.
		Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent
1871	New South Wales	45·5	29·3	9·7	7·9	1·8	0·8	5·0
	Victoria	34·4	23·3	15·5	12·3	2·5	2·2	9·8
	Queensland	36·5	26·5	12·8	6·0	2·2	2·4	13·6
	South Australia	27·1	15·2	6·4	18·9	3·5	5·0	23·9
	Western Australia	59·0	28·7	2·1	5·6	3·6	0·2	0·8
	Tasmania	53·5	22·3	9·1	7·2	4·0	0·9	3·0
	New Zealand	41·8	13·9	24·8	8·6	1·5	1·9	7·5
	Australasia	39·1	23·1	13·6	10·5	2·4	2·0	9·3
1881	New South Wales	45·6	27·6	9·6	8·6	1·9	1·0	5·7
	Victoria	34·7	23·6	15·4	12·6	2·3	2·4	9·0
	Queensland	34·6	25·5	10·6	6·7	2·2	2·6	17·8
	South Australia	27·1	15·2	6·4	18·9	3·5	5·0	23·9
	Western Australia	54·7	28·3	3·4	7·0	4·3	...	2·3
	Tasmania	51·7	19·9	7·9	9·5	3·5	1·6	5·9
	New Zealand	41·5	14·1	23·1	9·4	1·4	2·3	8·2
	Australasia	39·1	22·2	13·4	10·9	2·2	2·2	10·0
1891	New South Wales	44·8	25·5	9·7	9·8	2·1	1·2	6·9
	Victoria	35·2	21·8	14·7	13·0	1·9	2·5	10·9
	Queensland	36·2	23·6	11·6	7·8	2·2	2·6	16·0
	South Australia	27·9	14·7	5·7	19·0	3·7	5·5	23·5
	Western Australia	49·7	25·3	4·0	9·2	3·2	0·6	8·0
	Tasmania	49·9	17·6	6·6	11·7	3·1	2·2	8·9
	New Zealand	40·0	13·9	22·6	9·9	1·1	2·4	10·1
	Australasia	39·1	21·1	13·0	11·4	2·1	2·3	11·0

From the foregoing tables it will be seen that while there were fluctuations in individual colonies, the relative strength of the principal denominations in the whole of Australasia showed but little alteration during the twenty years from 1871 to 1891. The Church of England at each census embraced 39·1 per cent. of the population, while the Roman Catholic Church receded from 23·1 per cent. in 1871 to 22·2 per cent. in 1881, and still farther to 21·1 per cent. in 1891. The Presbyterian Church also receded from 13·6 per cent. in 1871 to 13·4 per cent. in 1881 and 13·0 in 1891; while the various Methodist bodies, which have been classed together, increased from 10·5 per cent. in 1871 to 10·9 per cent. in 1881 and 11·4 per cent. in 1891. Congregationalists and Baptists taken together were equal at the three enumerations, but the former show a slight decrease during the twenty years, while the latter show a corresponding increase. The column headed "All others" also shows an increase from 9·3 per cent. to 11·0 per cent. during the period. This column contains all the minor denominations, of which none are at all numerous except Lutherans in Queensland and South Australia; those whose denomination could hardly be classed as a religion; and all those who, from conscientious scruples, took advantage of the clauses of the Census Acts by which the filling in of the column "Religious Denomination" was left optional.

In 1871 the relative strength of the Church of England was greatest in the colonies in the following order:—Western Australia, Tasmania, New South Wales, New Zealand, Queensland, Victoria, and South Australia; but in 1891 the order had changed to Tasmania, Western Australia, New South Wales, New Zealand, Queensland, Victoria, and South Australia. The Roman Catholic Church in 1871 was relatively strongest in New South Wales; in 1881, in Western Australia; and in 1891, again in New South Wales, with Western Australia and Queensland following closely, and South Australia and New Zealand last on the list. The Presbyterian Church has always been most numerous in New Zealand and Victoria, and weakest in Western Australia, South Australia, and Tasmania. The various Methodist denominations were at each enumeration strongest in South Australia, where they numbered close upon one-fifth of the total population. They were also considerably above the average strength in Victoria, while the only colony in which they now fall much below the average is Queensland. Congregationalists and Baptists are also relatively most powerful in the southern colonies. The percentages shown in the column "All others" are unduly swollen in the case of Queensland and South Australia by the inclusion of Lutherans; were these omitted the figures for 1891 would be fairly equal for all the colonies.

In the table showing the actual number of adherents of each of the principal denominations for 1891, the Salvation Army is a new element. Any adherents to this persuasion who may have existed in 1881 were grouped with "All other Religions."

The Denominations in 1897.

It is estimated that at the end of 1897 the number of adherents to each denomination was as follows:—

Religious Denomination.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.	Australasia.
Church of England	592,264	414,192	175,497	101,143	80,560	85,667	291,950	1,741,273
Roman Catholics	337,843	256,523	114,201	53,453	40,989	30,209	101,532	934,750
Presbyterians	128,799	172,241	56,185	20,627	6,496	11,421	164,595	560,364
Wesleyan and other Methodists.	129,655	153,169	38,001	68,950	14,946	20,079	72,533	497,333
Congregationalists	28,392	22,805	10,552	13,462	5,117	5,270	7,778	93,376
Baptists	15,428	28,768	12,626	19,881	921	3,846	17,248	98,718
Lutherans	9,349	16,031	28,786	26,430	703	493	6,534	88,326
Salvation Army	12,142	13,951	4,951	4,935	13	1,424	10,916	48,332
Hebrews	6,457	6,665	996	952	419	98	1,702	17,289
Mahometans, Buddhists, Confucians, &c.	12,705	7,210	21,463	4,821	5,869	1,133	4,570	57,771
Others	50,426	84,683	21,442	48,390	5,891	12,078	49,698	272,608
Total	1,323,460	1,176,238	484,700	363,044	161,924	171,718	729,056	4,410,140

EDUCATION.

IT would have been strange if communities so prosperous as the Australasian colonies had neglected to provide for the education of the children. This duty, so vitally affecting the welfare of the people, has been recognised as one of the most important which the State could be called upon to discharge. In every province of the group, ample provision has been made for public instruction, such provision, indeed, in some cases, extending far beyond what has been done in most of the countries of the old world. In addition to a system of primary education, in all the colonies there are grammar and high schools, by means of which those who have the desire may qualify for the higher studies of the University. So bountiful is the provision made by the State that in most cases the cost of education is merely nominal, and the poverty of the parents ceases to be an excuse for the ignorance of the children. It is true that in the very early days of colonisation but little attention was paid to education; but as soon as the sharp struggle for bare existence was over, attempts were made to provide means of instruction for the rising generation, and the foundations were laid of an educational system that is in the highest degree creditable to these young communities. The religious bodies were naturally the first to build schools and provide teachers; but there was always a large proportion of persons who objected to denominationalism, principally those who belonged to denominations which were not subsidised by the State; hence there arose a National or non-sectarian system which has in the course of time almost monopolised the educational field.

In all the Australasian colonies the State system of education is secular. Compulsory clauses find a place in the Acts of the various provinces; but the enforcement of these is not everywhere equally strict. In Victoria, for example, compulsory attendance at school has been rigorously insisted upon, while in Queensland the principle of compulsion has been allowed to remain almost in abeyance, and in the other colonies it has been enforced with varying degrees of strictness. In Victoria, Queensland, New Zealand, and South Australia the primary education provided by the State is entirely free of charge to the parents; in New South Wales, Western Australia, and Tasmania small fees are charged, but these are not enforced where the parents can reasonably plead poverty.

The statutory school-age of each colony is as follows :—

New South Wales	over 6	and under	14	years.
Victoria	,, 6	,,	13	,,
Queensland	,, 6	,,	12	,,
South Australia	,, 7	,,	13	,,
Western Australia	,, 6	,,	14	,,
Tasmania	,, 7	,,	13	,,
New Zealand	,, 7	,,	13	,,

In New South Wales, for many years, a dual system of education was in existence. The four State-aided denominations—the Church of England, Roman Catholic, Presbyterian, and Wesleyan bodies—had schools supported by annual votes from Parliament, administered under the control of the head of each denomination for the time being. There were also National schools, likewise supported by the State, but under the control of a Board appointed by the Government. This plan was found to be costly and wasteful in the extreme, for in many country towns there were in existance several small and inefficient competing schools where the total number of children was not more than sufficient for one well-conducted establishment. So strongly was this evil felt that changes in the law were made from time to time, until at length the denominational system was abolished altogether, and one general and comprehensive plan of Public Instruction adopted in its place. This reform was not accomplished without much agitation, extending over a considerable period. A league was formed with the object of securing the establishment of secular, compulsory, and free education, and in 1880, under the auspices of Sir Henry Parkes, the measure establishing the present system became law. Education in the public schools is now non-sectarian, though facilities are afforded to clergymen to give religious instruction within specified school-hours to children whose parents belong to their denomination and desire that this instruction shall be given. It is compulsory, and free to all who cannot afford to pay, while a merely nominal fee is charged to those who are in a position to contribute towards the cost of the teaching of their children. For secondary education there are a number of superior and high schools entirely supported by the State, besides numerous colleges, grammar schools, and denominational schools which obtain no assistance from the Government, excepting the Sydney Grammar School, which receives a statutory endowment of £1,500. Scholarships and bursaries have been founded in connection with many of these schools. The University of Sydney, which is liberally endowed by private individuals as well as the State, grants degrees which rank with those of Oxford and Cambridge. Educational affairs in the colony are under the direction of a Minister for Public Instruction.

In Victoria, under an Act passed in 1872, a system of free, compulsory, and secular primary education is in force, under a Minister of Public Instruction, who is responsible to Parliament. The compulsory clause is very strictly enforced, especially in the large towns, and education is entirely free as regards the ordinary subjects of primary

instruction, while the teachers are allowed to impart instruction in additional subjects, for which a small fee is payable. Religion is strictly forbidden to be taught during school-hours, and at no time must a State teacher give instruction therein. Secondary education is almost entirely in the hands of private or denominational establishments. The higher education is supplied by the University, with its affiliated colleges.

The Education Department in Queensland is administered by the Secretary for Public Instruction. The Act now in force was passed in 1875, and is of a tolerably liberal character, primary education being secular and free. The compulsory clause has not been put into operation, as it would be a very difficult thing to enforce its provisions in the scattered and sparsely-populated districts of the interior. The public schools are divided into two classes, termed State and Provisional schools. A State school must have an average daily attendance of not less than thirty children, and the local district must contribute one-fifth of the cost of establishing, maintaining, repairing, and making additions to the building. In the case of the establishment of a Provisional school, the Minister may grant a subsidy towards the cost of erection and equipment of the necessary building, not exceeding one-half of the cost and in no case exceeding £50, provided the proposals of the promoters are submitted to him before they are carried out. Towards the administration and maintenance of this class of school the Government make a capitation grant, equal to the average cost per head of children in State schools. Secondary education is provided by grammar schools, which are liberally assisted by the State. The colony has no University of its own, but sends a fair number of students to the Universities of Sydney and Melbourne. The system of extension lectures in connection with the University of Sydney has been extended to Queensland ; and the Government of the colony have agreed to a proposal to establish a University in Brisbane.

The South Australian system of primary education, which was introduced in its present form in 1878, is very similar to the systems already described. Public instruction in the colony is presided over by a responsible Minister, with an Inspector-General and other officials. It is compulsory, secular, and free. Until the end of 1891 a small weekly fee was payable by all parents able to do so ; but at the beginning of 1892 primary instruction was made free until the scholar reached the age of 13 years or had been educated to the compulsory standard, and in 1898 the remaining fees were abolished by the Minister for Education. Children who have attained a certain standard of education are exempt from compulsory attendance. Religious instruction is not allowed to be given except out of ordinary school-hours. Secondary education is in the hands of private and denominational establishments ; and the University of Adelaide, though small, is efficient.

Under the Elementary Education Act of 1871, primary education in Western Australia is imparted in Government schools, which are entirely supported by the State. An Amendment Act passed in 1893

placed educational affairs in the colony under the control of a responsible Minister, and afforded facilities for special religious teaching, half-an-hour per day being allotted to clergymen for the instruction of children of the same denomination. Another Amendment Act which came into force in 1894 abolished payment by results, and gave powers for the enforcement of compulsory attendance. Until 1895, private schools were also assisted from the public purse, on condition of submitting to Government inspection in secular subjects; but towards the end of that year an Act was passed abolishing the system of annual grants to denominational schools, and providing that during the year 1896 the State should hand over, as compensation for the abolition of these subsidies, the sum of £15,000, to be divided between the schools in like proportions to those which governed the distribution of the annual vote in 1895. Under the regulations of 1895, children can claim free education on account of inability to pay the fees, of living more than 1 mile from school, of having made 400 half-day attendances in the previous year, or of other reasons approved by the Minister. There is a high school at Perth, which is subsidised by the State; and further encouragement is given to secondary instruction by the institution of scholarships which are open to competition.

In Tasmania the Chief Secretary holds the portfolio of Education, and has especial charge of matters relating to primary instruction. The permanent head of the department is styled Director of Education. There are public schools in every country town throughout the colony, and several in Hobart and Launceston. The principle of compulsion is in force in these two towns; and special religious instruction is given by the Church of England clergy out of school-hours. Secondary education was at one time encouraged by exhibitions, but none have been granted since 1893. The University of Tasmania was established in 1890, and at first was merely an examining body, but in the beginning of the year 1893 a building was acquired and teaching provided for the purpose of enabling students to graduate in Arts, Science, and Laws. The first degree, one of B.A., was taken in 1894. The Government grants the institution an annual subsidy, the amount voted by Parliament in 1896 being £2,500.

New Zealand has an educational system which is entirely secular and free. There is a separate Department of Education, presided over by one of the responsible Ministers of the Crown, as in the other colonies. The whole colony has been divided into school districts, each presided over by a local Board, and a capitation grant of £3 15s. per head is paid by the State for every child in average attendance, and, in addition, 1s. 6d. per child in support of scholarships, with other grants for school-buildings, training of teachers, etc. In districts where there are few or no Europeans, native schools are maintained for the Maori children. High schools, colleges, and grammar schools provide the means for acquiring secondary education; and the University of New Zealand, like those of the other colonies, is empowered to confer the same degrees

as the Universities of Oxford and Cambridge, except as regards Divinity. It is, however, only an examining body, the undergraduates keeping their terms at the affiliated colleges—the University of Otago, the Canterbury College, and the Auckland University College.

State Schools.

Exclusive of the native schools established by the New Zealand Government for the instruction of the Maori children, there were 7,809 public schools in Australasia at the close of the year 1896. The number in operation in each of the seven colonies will be seen on reference to the table given below. As a rule, secondary education is provided by private institutions, and the figures quoted may be taken as representing primary schools; but in New South Wales there are five high schools, which it is customary to include with the others. The secondary schools in New Zealand are excluded from the returns:—

Colony.	State Schools.	Teachers employed, exclusive of Sewing Mistresses.		
		Males.	Females.	Total.
New South Wales	2,574	2,332	2,043	4,375
Victoria	1,886	1,760	2,352	4,112
Queensland	759	798	917	1,715
South Australia	639	396	736	1,132
Western Australia	150	103	157	260
Tasmania	268	215	274	489
New Zealand	1,533	1,424	2,091	3,515
Australasia	7,809	7,028	8,570	15,598

In all the colonies, with the exception of Victoria, there has been a steady increase in the number of State schools during the past few years. In Victoria the reverse has been the case, for since 1891 the number in operation has decreased from 2,233 to 1,886. This is the result of a scheme of retrenchment, initiated at that time, by which there has been an amalgamation of schools in large centres of population; and in other districts schools have been closed and the pupils conveyed to other institutions at the cost of the State. Under the first part of this scheme no fewer than 69 schools have been converted into adjuncts to others in the neighbourhood, at an estimated annual saving of £43,900. At these adjuncts—which are not included in the number of schools set down in the table—instruction is now imparted only to young children, in junior classes. The system of conveyance, brought into operation under the second part of the scheme, has been the means of closing 241 schools, an allowance being made by the State to parents to defray the cost of conveyance of their children to schools further removed from their place of abode. After deducting the cost of con-

veyance, the net annual saving to the State is estimated at £14,170. Although, in comparison with 1895, the number of schools in operation shows the diminution which has been characteristic of the last five years, yet the number of localities served in 1896 actually showed an increase during the twelve months, the explanation being the conversion of a number of full-time into part-time schools, two of which are regarded as equivalent to one school, and so enumerated by the department.

The 759 schools in Queensland include 385 State schools, and 374 "provisional" schools, as they are termed, to the administration and maintenance of which the Government make a capitation grant, equal to the average cost per head of children attending State schools. No fewer than 64 of these provisional schools have a permanent average daily attendance beyond the number of thirty, which justifies the establishment of a State school; and the non-substitution of State schools for these overgrown provisional schools is no doubt due to the fact that the inhabitants of a district have to find one-fifth of the cost of such schools before the work can proceed. For Western Australia, the returns for years prior to 1896 included State-aided denominational schools. From these establishments the Government subsidy was withdrawn at the end of 1895, and thenceforth they were placed outside the sphere of the operations of the Education Department. This point should be borne in mind when comparing the figures with those given for previous years, otherwise the extension of public instruction in that colony would seem to be incommensurate with the growth of population. As a matter of fact, the progress has been rapid, and 17 new State schools were opened in 1896.

As shown in the previous table, the total number of teachers employed in the 7,809 State schools was 15,598—7,028 males and 8,570 females—exclusive of sewing-mistresses, of whom there were 67 in New South Wales, 385 in Victoria, 32 in South Australia, 21 in Western Australia, and 191 in New Zealand. New South Wales is the only colony where employment is afforded to a greater number of male teachers in comparison with females; in all the other provinces there is a large preponderance of female instructors. In most of the colonies provision is made for the training of teachers. In New South Wales, the Fort-street Training School for male students had 26 students in training in 1896, 16 of whom held full-scholarships, 9 half-scholarships, and 1 attended at his own expense; while at the Hurlstone Training School for female students there were 29 students in residence, 15 of whom held full-scholarships, 10 half-scholarships, and 4 attended at their own charge. Special classes for the training of pupil-teachers in Melbourne and suburbs are carried on at the Working Men's College. In 1896 there were 269 students in attendance at these classes, namely, 30 in Class III, 116 in Class II, and 123 in Class I. There were 17 students in the training college in South Australia. In New Zealand, the Education Boards of North Canterbury and Otago have institutions for the training of teachers.

Enrolment at State Schools.

The gross enrolment of pupils at the State schools of Australasia during 1896 was 845,114; while the net enrolment, or the number of distinct children, came to 727,052, forming 16·98 per cent. of the mean population. In most of the colonies the net enrolment is obtained in an empirical manner—by deducting a certain proportion (about 12 per cent.) from the gross figures; but in Victoria the actual figures are found by the Education Department. The appended table gives the gross and net enrolment for each colony. During the last five years there has been an increase of 5·96 per cent. in the net enrolment at the State schools of Australasia. Of the individual colonies, the largest proportional increase has taken place in Western Australia, where, excluding the State-aided denominational schools, it reached 152·61 per cent. In South Australia the increase has been 27·29 per cent.; and in Queensland, 20·35 per cent. For New Zealand, Tasmania, and New South Wales, the increase has been respectively 9·63 per cent., 8·43 per cent., and 2·75 per cent. The only colony which exhibits a diminution in the number of scholars in State schools since 1891 is Victoria, where the number has fallen from 253,469 to 235,617, or to the extent of 7·04 per cent. Reference has already been made to the policy of retrenchment adopted in that colony. The decline in the number of children attending school is attributable to this cause. In order to avoid expenditure on additional buildings as much as possible, children below the statutory school age of six years have been excluded, as well as those above the age of thirteen who have gained a certificate of standard proficiency. The actual number of children of the statutory age in attendance has rather increased:—

Colony.	Gross Enrolment.	Net Enrolment.	
		Total.	Percentage of Population.
New South Wales	251,821	221,603	17·21
Victoria	235,617	209,015	17·74
Queensland	90,780	81,754	17·53
South Australia	65,908	59,944	16·71
Western Australia	9,008	7,927	6·63
Tasmania	20,826	15,772	9·65
New Zealand	171,154	131,037	18·55
Australasia	845,114	727,052	16·98

It will be seen that the largest percentage of the population enrolled at State schools was to be found in New Zealand, and the lowest in Western Australia. Such a comparison, however, is of very little value, because the proportion which the children of school age bear to the

total population varies considerably in the different colonies, being as high as 27 per cent. in New Zealand, as compared with 24 per cent. in New South Wales and 21 per cent. in Victoria, while in Western Australia, which is still at its pioneer stage, there must of necessity be a much smaller percentage of dependent children than in the more widely settled colonies. Farther on in this chapter will be found a comparison of the children of school age, taken for this purpose as between 5 and 15 years in all the colonies, with the number enrolled at all institutions, both State and private. This will give a better view of the relative strictness or laxity with which the attendance of children at school is enforced in the different provinces.

More important, perhaps, than the number of children enrolled is the average attendance. This, for scholars at the State schools during the year 1896, was 502,429, representing about 64 per school and 32 per teacher, and 11·74 per cent. of the population of Australasia. The figures for the individual colonies will be found appended :—

Colony.	Scholars in average attendance.			
	Total.	Per School.	Per Teacher.	Percentage of population.
New South Wales	142,192	55	33	11·04
Victoria	138,241	73	34	11·73
Queensland	54,316	72	32	11·65
South Australia	40,449	63	36	11·27
Western Australia	6,470	43	25	5·41
Tasmania	11,508	43	24	7·04
New Zealand.....	109,253	71	31	15·47
Australasia	502,429	64	32	11·74

According to the official returns, the proportion of the net enrolment of scholars in average attendance was highest in New Zealand, the percentage for which colony was 82·1. This was closely followed by Western Australia with 81·6 per cent., while Tasmania was third with 73 per cent. The percentage for South Australia was 67·48 ; for Queensland, 66·44 ; for Victoria, 66·14 ; and for New South Wales, 64·16. Comparing the first with the last year of the latest quinquennial period, Tasmania is the only colony where the average attendance has not improved, Queensland especially showing a great advance in regularity of attendance. The percentage of the population of New Zealand—15·47—shown as in average attendance at the State schools, it must be remarked, is rather higher than it should be, on account of a number of Maori children attending the ordinary schools in districts where there are none established for the "natives," while the basis on which the proportion has been calculated is the population exclusive

of aborigines. Still, when full allowance has been made on this score, the percentage is much higher than is found in any other colony. The "Native" schools in New Zealand, of which the number was 74, had a teaching-staff of 136, exclusive of 16 sewing-mistresses, in 1896, with an enrolment of 2,862 and an average attendance of 2,220 scholars, and the expenditure on the schools during the year amounted to £18,603. Of the children who received instruction at these institutions, 77 per cent. were Maori, 9 per cent. were half-caste, and 14 per cent. were European or, in the words of the Minister of Education, "inclining to the European" race.

Cost of Primary Education.

The official reports of the various colonies show that during the year 1896 the cost of administration and maintenance of the State schools of Australasia was £1,984,870, while the revenue from fees, rents, sales of books, etc., amounted to £101,589, leaving a net cost to the State of £1,883,281, excluding a sum of £181,740 expended on school premises. Assistance to private schools where primary or secondary education is given is not included in these figures. The expenditure for each of the colonies will be found below. In the case of New Zealand, the amounts given in the table represent the disbursements of the Education Boards, and not the actual capitation grant received from the Government during 1896, as the former figures more accurately represent the cost of the State schools for the twelve months. From the total cost to the State in that colony, the receipts from the Education Reserves, £37,160, have not been deducted, as the capitation grant is now reduced by an amount equivalent to the rents derived from these reserves, so that practically they are paid into the Consolidated Revenue. The figures do not give the whole expense to the State, as most of the principal teachers enjoy residences for which no rent charge is made. In the case of New South Wales, the annual value of these residences is £35,000 :—

Colony.	Expended on Administration and Maintenance.	Receipts from Fees, Rents, &c.	Net Cost to State, excluding Premises.	Expended on School Premises.
	£	£	£	£
New South Wales	594,555	74,866	519,689	56,752
Victoria*	583,273	5,817	577,456	10,897
Queensland	181,556	.....	181,556	14,232
South Australia	137,315	13,796	123,519	7,172
Western Australia	32,567	2,353	30,214	33,769
Tasmania	33,113	1,134	31,979	5,384
New Zealand	422,491	3,623	418,868	53,534
Australasia	1,984,870	101,589	1,883,281	181,740

* Year ending 30th June, 1897.

In the colonies of Victoria, Queensland, South Australia, and New Zealand, primary education is free; in the other three colonies a small fee is charged, but, as will be seen from the table, the revenue derived from this source is very small in Tasmania and Western Australia. In New South Wales the fee charged is 3d. per week for each child, the sum payable by one family being limited to one shilling; and the receipts amount to a considerable sum annually, totalling £74,866 in 1896. Free education is, of course, given to those children whose parents cannot afford to pay for them, and the number of children so treated during last year was 28,420—equal to 11·29 per cent. of the gross enrolment of distinct pupils. In Tasmania, the teachers are allowed to retain the bulk of the fees collected, their salaries being fixed accordingly. Thus, in 1896, the fees amounted to £9,794, of which the Government took £1,134, as shown above, and the teachers retained the balance of £8,660. In the smaller schools the fees go wholly to the teacher, and in the larger the State takes a small share where the amount received is moderate, but a more substantial part where the fees amount to hundreds per annum. Free education is, as in New South Wales, granted in cases of necessity, and for this purpose free public schools were established in Hobart and Launceston; but as it was considered that this system affixed a brand of pauperism to the children making use of them, they have now been abolished, and the pupils find free education at the ordinary schools. The other colony where a fee is still charged for primary education is Western Australia; but there free instruction is granted for a number of reasons, such as inability to pay the fee, living over a mile from the nearest school, and having made over 400 half-day attendances in the previous year; and in 1896, out of a gross enrolment of 9,008 pupils, free education was granted to 3,006, of which inability to pay the fee was assigned in only 741 cases. Further, the Secretary of Education has recommended the abolition of fees in the case of all children under 14 years of age. The receipts, amounting to £2,353, set down in the above table, consisted exclusively of fees.

Although primary instruction is free in Victoria, South Australia, and New Zealand, yet Queensland is the only colony where no fees were received in 1896; but, as pointed out on a previous page, the State receives contributions from local districts towards the construction of school buildings, the amount of such contributions in 1896 being £2,905. In Victoria fees are charged for instruction in extra subjects, such as book-keeping, shorthand, algebra, Euclid, French, Latin, and science. During last year extra subjects were taught in 128 schools, and the fees collected represent £1,780 of the sum of £5,817 shown above, the balance consisting of £3,435 derived from the sale of departmental publications, and £602 from rents, which, although not applied towards the reduction of the departmental expenditure by the Government, has been so treated here. In South Australia the receipts during 1896 included £7,295 from rents, £3,835 from sale of

books and school material, and £2,633 from fees. Towards the revenue from fees, the Advanced School for Girls contributed £1,400, the balance of £1,233 representing fees which were payable in 1896 by pupils in the fifth class who had passed the standard of education, but which have now been abolished by the new Minister for Education. The receipts of £3,623 in New Zealand were made up of fees, donations, rents, sales, etc., received by the Education Boards, and represent the whole local contributions.

It will be seen from the above table that, excluding the expenditure on school premises, the net cost of public instruction in Australasia in 1896 was £1,883,281. This is equivalent to £3 15s. for each child in average attendance during the year; while, if the expenditure on buildings is taken into account, the amount reaches £4 2s. 2d. per child. The figures for each of the seven colonies are presented below:—

Colony.	Net Cost to State, per scholar in average attendance.	
	Excluding School Premises.	Including School Premises.
	£ s. d.	£ s. d.
New South Wales	3 13 1	4 1 1
Victoria	4 2 1	4 3 7
Queensland	3 6 10	3 12 1
South Australia	3 1 1	3 4 8
Western Australia	4 13 4	9 17 9
Tasmania	2 15 7	3 4 11
New Zealand	3 16 8	4 6 6
Australasia	3 15 0	4 2 2

In the matter of expenditure per child in average attendance, New South Wales now occupies a medium position, although a few years back the cost of public instruction in that colony was higher than in any of the other provinces. Careful retrenchment has been effected in the department, without impairing the efficiency of the service. Most of the colonies, however, show a reduction in their expenditure on education. Comparing the first with the last year of the quinquennial period ended 1896, there has been a reduction in the expenditure on administration and maintenance equal to 7s. 4d. per child in average attendance in New South Wales, £1 1s. 5d. in Victoria, 14s. 11d. in Queensland, and 5s. 2d. in South Australia.

Encouragement of Secondary Education.

Before passing to the consideration of private schools, reference may be made to the encouragement of secondary education by the State, apart from grants to the Universities. In New South Wales there are numerous private colleges of a high class, but the only one now receiving assistance from the Government is the Sydney Grammar School, which has a statutory endowment of £1,500 per annum. There are, however, five State High Schools in the colony—two for boys and three for girls—where higher education may be obtained at a moderate cost; as well as 100 Superior Schools, in the higher classes of which pupils are prepared for the public examinations. In 1896 the expenditure on the High Schools amounted to £6,579. Of the High School pupils, 84 secured passes at the junior and 13 at the senior examinations, while 53 qualified for matriculation; and 4 senior and 298 junior passes were secured by the Superior Schools, as well as 57 junior passes by other public schools not classed as such. A scheme of scholarships for High and Superior Schools, and for the University, is in existence. In 1896, 110 candidates were successful at these examinations. Fifty-seven secured scholarships and 41 bursaries for High and Superior Schools; 2, bursaries at the Sydney Grammar School; and 10, University bursaries.

In Victoria, as previously pointed out, extra subjects are taught for a small fee at 128 of the public schools. Secondary education was also liberally encouraged by the State by annually granting 200 scholarships at private colleges, tenable for a period of three years, to State school pupils. The retrenchment scheme, to which reference has been made, has, however, seen the abolition of these scholarships; but the pupils have not been left to their own resources entirely, for the principals of the private colleges have stepped in and now offer a large number of scholarships to the children attending State schools. At the examination for such scholarships, held in December, 1896, 425 candidates from State schools and 12 from private schools presented themselves, and 127 scholarships were awarded. The Department annually bestows a number of exhibitions to the University on pupils who have gained scholarships at secondary schools. At the examinations for these exhibitions, held in January, 1897, 28 candidates were successful. There are at present 49 exhibitions.

Steps have recently been taken in Queensland to add to the curriculum of the State schools, in order that they may be brought more into line with the superior public schools of New South Wales. The State Education Act Amendment Act of 1897 extends the field of instruction in the two highest classes of those schools, adding Euclid and Algebra, a branch of science, the study of an English classic, and a fuller course of English history, to the subjects taught. Secondary education, however, has long been provided for by the liberal endowment of the private grammar schools, and by a system of scholarships for these schools, which at present number ten. Each is subsidised to the extent of £1,000 annually; and the total amount of endowments and grants by

the State to these institutions to the end of 1896 was £226,535. The scholarships at these schools annually awarded by the Government to State school pupils were formerly 128 in number. In 1896, 279 children presented themselves for examination, and 95 boys and 33 girls were successful. The total number of State scholars attending grammar schools in that year was 231, of whom 169 were boys and 62 were girls. In 1897 it was thought desirable to make some changes in the system, with the object, first, of bestowing the scholarships only upon children possessed of more than ordinary ability; second, of allowing the successful candidates to select the school at which they wished to study; third, of granting additional aid in cases where it was necessary for the child to leave home in order to attend school, and the parents were unable to pay for his maintenance except under their own roof; and, fourth, of granting some encouragement to students at Agricultural Colleges. With these objects in view, it has been decided in future to grant, instead of 128 scholarships at specified schools, 36 scholarships, providing free education at any grammar school; 8 bursaries, providing free education at any grammar school, with an allowance for board not exceeding £30 per annum; and 4 bursaries, providing free board and instruction as resident students at Gatton Agricultural College. These are all tenable for a period of three years.

In South Australia the Advanced School for Girls was attended by 110 pupils in 1896. The fees amounted to £1,400, and the expenditure to £1,200, so that there was a profit on the year's transactions of £200. There are four bursaries for this school annually awarded to State school pupils. Scholarships to public schools, six in number, are also awarded annually by the State, as well as nine University scholarships, namely, three entrance scholarships, three first-year undergraduate scholarships, and three second-year undergraduate scholarships. In Western Australia there is a high school for boys at Perth, which is subsidised by the Government to the amount of £500 annually. In 1896 the number of pupils on the roll was 124, and the average daily attendance was 101. Two State scholarships for this school, valued at £75 each and tenable for three years, are awarded annually. The Government also offers annually ten bursaries of the value of £10 to children attending the elementary schools of the colony—five to boys, and five to girls. In Tasmania a system of exhibitions was at one time in force, but none have been granted since 1893. New Zealand has 24 incorporated or endowed secondary schools, with a regular teaching staff of 132, and a visiting staff of 49. At the end of 1896 there were 2,614 pupils on the rolls, of whom all but 168 were over 12 years of age. For that year the receipts amounted to £57,643, including £26,935 derived from interest on investments and rents of reserves, and £22,451 from fees. These schools, it should be noted, are not supported directly by the State. Some have endowments of land, and others receive aid from the rents derived from the Education Reserves administered by the School Commissioners.

Private Schools.

At the end of 1896 there were 2,774 private schools in Australasia, with a total teaching staff estimated at 8,057. The total number of pupils on the rolls was 151,009, and the average attendance, 117,049. Below will be found the figures for the individual colonies. For the first time, the returns for Western Australia include those schools which were assisted by the State, and from which the Government subsidy was withdrawn at the end of 1895. Prior to 1896 these schools were included in the returns of the Department of Education:—

Colony.	Schools.	Teachers.	Enrolment.		Average Attendance.
			Total.	Percentage of Population.	
New South Wales...	893	3,087	53,967	4·19	43,069
Victoria.....	939	2,357	46,288	3·93	30,615
Queensland	185	619	12,953	2·78	11,208
South Australia ...	232	670	11,458	3·19	9,984
Western Australia	56	176	4,032	3·37	3,074
Tasmania	186	*420	8,364	5·12	6,912
New Zealand	283	728	13,947	1·97	12,187
Australasia ...	2,774	8,057	151,009	3·53	117,049

* Estimated.

In New South Wales there has been a large increase in private schools during the past five years. Since 1891 the number of schools has increased from 704 to 893, and the enrolment from 45,018 to 53,967. Of the private schools in the colony, 293 are Roman Catholic, as compared with 51 connected with the other Churches, while 549 are undenominational; but of the scholars enrolled, more than two-thirds—36,552—are in attendance at Roman Catholic schools, while 3,099 attend Church of England schools; 543, schools belonging to other denominations; and 13,773, the undenominational schools. Since 1891 the pupils of the Roman Catholic schools have increased by 19 per cent., which is rather less than the general rate of increase. Many of these private schools are institutions of a high class. Only one—the Sydney Grammar School—is assisted by the State, which provides a statutory endowment of £1,500 per annum. In 1896 the staff of this school consisted of 17 teachers; the total enrolment was 458; the average enrolment, 378; and the average daily attendance, 362. The receipts for the year totalled £8,163, of which £6,550 represented fees; while the expenditure was £7,865.

The increase in the enrolment in the private schools of Victoria during the last five years has not been great, only amounting to 2,200.

In this colony the principals of a number of the private colleges hav.. granted scholarships at their institutions to State school pupils since the Government retrenched in this respect. These colleges are not subsidised by the State.

Of the 185 private schools in Queensland, the principal are the ten grammar schools, which are situated at Brisbane, Ipswich, Maryborough, Rockhampton, Townsville, and Toowoomba. In each of the first four towns there are two schools—one for girls and one for boys. In 1896 the teaching staff of the grammar schools consisted of 50 permanent and 16 visiting teachers; the aggregate number of pupils on the rolls was 797; and the average daily attendance, 698. As previously mentioned, each of the ten schools receives an annual grant of £1,000 from the State. During 1896 the total receipts amounted to £23,494, and the expenditure to £22,689, of which salaries and capitation fees absorbed £13,995.

There is no special information available with respect to the private schools in South Australia. In Western Australia the principal private institution is the Perth High School for Boys, which receives an annual subsidy of £500 from the Government. The school is under the supervision of a Board of Governors. In 1896 the teaching staff numbered 5; the total number of pupils enrolled was 124, of whom 22 were boarders; and the average daily attendance was 101. The receipts for the year amounted to £1,909, and the expenditure to £1,846.

Included with the 186 private schools in Tasmania are 13 grammar schools and colleges, 6 of which are undenominational in character, 3 are connected with the Church of England, 2 with the Roman Catholic Church, 1 with the Wesleyan Church, and 1 with the Society of Friends. There were 92 permanent teachers at these institutions in 1896, and accommodation was provided for 2,252 students. The average attendance during the year was 1,452, of whom 461 were of the age of 15 years and upwards. As in New South Wales, the majority of the pupils at private institutions in New Zealand are enrolled at the Roman Catholic Schools. In 1896 the number of schools belonging to this denomination was 115, at which 9,590 scholars were enrolled, with an average daily attendance of 8,240.

State and Private Schools.

As almost the whole of the children enrolled at the schools of Australasia are over 5 and under 15 years of age, that period may be taken as the school age of the colonies; and assuming that the proportion which the children of such ages bear to the total population is the same now as it was when the last census was taken in 1891, there were 1,001,050 children of school age in Australasia in 1896, while 878,061 pupils were enrolled in the State and private schools. The estimated number of children of school age and the net enrolment of scholars in each province will be found below. It should not be forgotten, however,

that the composition of the population of some of the colonies has considerably changed during the past few years. It is quite obvious, for instance, that the percentage of children must be very much less now in Western Australia than it was in 1891, while the proportion in other colonies must be higher, on account of the departure of many bread-winners in search of employment. Some allowance has been made on this account; but they are changes which are not accurately determinable at the present time, and should be kept in view when considering the following figures :—

Colony.	Estimated Children of School Age.	Net Enrolment of Scholars.
New South Wales	300,923	275,570
Victoria	259,266	255,303
Queensland	102,233	94,707
South Australia	90,471	71,402
Western Australia	19,535	11,959
Tasmania	39,905	24,136
New Zealand	188,717	144,984
Australasia	1,001,050	878,061

It is estimated that, of the scholars enumerated above, 619,478, or 70·55 per cent. of the net enrolment, are, on an average, in daily attendance. There is, it will be seen, great room for improvement in most of the colonies in the attendance at school of children of ages at which they might very well be receiving instruction. Of course, many such children are exempt by law from school attendance, the maximum school age in Queensland, for instance, being 12 years. Compared with the total population of each colony, the proportion of children enrolled was as follows :—

	Net Enrolment per cent. of Population.
New South Wales	21·40
Victoria	21·67
Queensland	20·31
South Australia	19·90
Western Australia	10·00
Tasmania	14·76
New Zealand	20·52
Australasia	20·51

This shows a net school enrolment in Australasia of rather more than one in every five inhabitants—a proportion as favourable as that of any European country.

The number of children attending school has increased at a far greater rate than the actual number of children of school age, showing that the advantages of education have been of late years more within the

reach of the masses than formerly. The number of children attending school in various years since 1861 was as follows :—

1861	130,060
1871	312,130
1881	670,776
1891	803,800
1896	878,061

From 1861 to 1896 the children of school age increased by 306 per cent., but the number of children in attendance at school increased by no less than 575 per cent. during the same period.

University Education.

The advance of education is hardly more clearly indicated by the institution and success of Colleges and Universities than is the progress of wealth or the attainment of leisure. In Australia the earliest attempts to provide for what may be termed the luxuries of education were made in New South Wales in 1852, and in Victoria in 1855, when the Universities of Sydney and Melbourne respectively were established. No other colony of Australasia was at that time sufficiently advanced in wealth and population to follow the example thus set; but New Zealand in 1870, South Australia in 1874, and Tasmania in 1890, each founded a University. In all cases the Universities are in part supported by grants from the public funds, and in part by private endowments and the fees paid by students.

The Government endowment, lecture fees, and income from other sources, received by the Sydney, Melbourne, Adelaide, and Tasmanian Universities in 1896, were as follow :—

University.	Government Endowment.	Lecture Fees.	Other Sources.	Total.
	£	£	£	£
Sydney	11,400	8,171	11,923	31,494
Melbourne	12,250	15,359	828	28,437
Adelaide	3,201	4,064	4,305	11,570
Tasmania	2,500	112	266	2,878

In addition to the above annual endowment, the Adelaide University has received a perpetual endowment of 50,000 acres of land from the Government of South Australia. The University of New Zealand has a statutory grant of £3,000 a year from Government, and an additional income of about £2,500 from degree and examination fees. Of the affiliated colleges, Auckland University College is in receipt of a statutory grant of £4,000 a year from Government. The University of Otago derives a sum of about £5,500 annually from rents of reserves.

The number of students attending lectures in 1896 is shown below. In New Zealand the students keep their terms principally at the University of Otago, the Canterbury College, and the Auckland University College. In addition to the 16 unmatriculated students who attended classes at the University of Sydney in 1896, there were 396 persons who attended extension lectures during the year :—

University.	Students attending Lectures.		
	Matriculated.	Not Matriculated.	Total.
Sydney	438	16	454
Melbourne	536	132	668
Adelaide	105	215	320
New Zealand	430	247	677
Tasmania	28	9	37
Total	1,537	619	2,156

Attached to the University of Sydney there are three denominational colleges for male students, and a fourth, undenominational in its character, for female students. In Melbourne there are three affiliated denominational colleges, one of which contains a hall for the accommodation of female students. In Adelaide and Hobart there are no affiliated colleges attached to the University; and in New Zealand the University itself is an examining and not a teaching body, the students keeping their terms at three undenominational colleges at Dunedin, Christchurch, and Auckland, besides several smaller institutions which have supplied a few graduates.

The Australasian Universities are empowered to grant the same degrees as the British Universities, with the exception of degrees in Divinity. In all the Universities women have now been admitted to the corporate privileges extended to male students; and at the Sydney, Melbourne, and Adelaide Universities this includes qualifying for degrees in medicine.

The number of degrees conferred by the five Universities, including those bestowed on graduates admitted *ad eundem gradum*, is as follows :—

Sydney	1,471
Melbourne	2,452
Adelaide	394
New Zealand	746
*Tasmania	14

* Not including *ad eundem* degrees.

and there are over 1,500 students qualifying for degrees at the present time.

Technical Education.

Technical instruction is given in nearly all the capital cities of the Australasian colonies, as well as in many other parts of the country, and there is every probability that instruction in such matters will before long be still further extended. The State expenditure on this important branch of education, in five out of the six colonies where technical instruction is given, will be found below; similar information for South Australia is not available :—

	£
New South Wales	24,815
Victoria	12,000
Queensland	2,157
Tasmania	842
New Zealand	1,928

In New South Wales, during the year 1878, a sum of £2,000 was granted by Parliament towards the organisation of a Technical College, and for five years the work of the institution was carried on in connection with the Sydney School of Arts. In 1883, however, a Board was appointed by the Government to take over its management, and the Technical College thenceforth became a State institution. Towards the end of 1889 the Board was dissolved, and the institution came under the direct control of the Minister of Public Instruction. The College, which, with the Technological Museum, is housed in a fine building at Ultimo, Sydney, is open to both male and female students. Branch technical schools have been established in the suburbs of Sydney and in many of the country districts, and technical instruction is also given in some of the public schools. In 1896 there were 200 technical classes in operation, of which 83 were held in Sydney and suburbs, 97 in the country districts, and 20 in connection with the public schools. The enrolment at these classes was 7,119, namely, 3,880 in Sydney and suburbs, 2,285 in the country districts, and 954 at the public schools. The number of individual students under instruction during the year was 5,396. In 1896 a Technical College was opened at Newcastle, and a new College at Bathurst in June, 1898. During the year the expenditure by the Government on technical education amounted to £24,815, of which £20,976 was expended on the Technical College and branch schools, and £3,839 on account of Technological Museums. Fees to the amount of £3,611 were received from the students.

Technical education in Victoria has extended rapidly, but while the Government of New South Wales has wholly borne the cost of this branch of instruction, that of Victoria has received great assistance from private munificence, the Hon. F. Ormond, M.L.C., having given £15,500 to assist in the establishment of a Working Men's College. At the end of 1896 there were 18 Schools of Mines and Technical Schools receiving

aid from the State. This number is less than that of the previous year, in consequence of a decision of the Department to restrict technical instruction in Melbourne and suburbs to the Working Men's College. The total State expenditure during the year was £12,000.

Technical education has well advanced in South Australia. The School of Design in Adelaide during 1896 had 354 students on the roll, and there were branch schools at Port Adelaide and Gawler with an enrolment of 15 and 36 students respectively. The School of Mines and Industries, founded in 1889, had an enrolment of 805 students in 1896. Also, manual instruction is imparted in the public schools.

In Queensland technical education is active. There are eleven Technical Colleges in existence, for the most part having connection with the Schools of Art. They are situated at Brisbane, South Brisbane, Bundaberg, Charters Towers, Cooktown, Gympie, Mackay, Maryborough, Rockhampton, Townsville, and West End, Brisbane. The State grants a subsidy of £ for £ of fees contributed by students. In 1896 the total payments of the State to these institutions amounted to £2,157. The total receipts of the Colleges during the year reached a sum of £4,453; and the expenditure was £3,878, of which salaries of teachers absorbed £2,206. The number of individual students receiving instruction was 1,501, namely, 782 males and 719 females. Legislative powers have been taken for the establishment of a School of Mines, but the work has not yet been commenced.

In Tasmania the foundations of new Technical Schools were laid in 1889 in Hobart, and there is a branch school in Launceston. The schools are under the direction of local Boards of Advice, the members of which act directly under the Minister in charge of education. The number of distinct students in 1896 was 334, of whom 115 were under tuition at Hobart, and 219 at Launceston. The State aid during the year was £842. Western Australia is only now extending its educational operations so as to embrace technical education. A site has been selected and plans are being considered for the erection of a Technical College at Perth.

In New Zealand there is a School of Mines in connection with the University of Otago, and other two Schools of Mines in mining districts; a School of Engineering and Technical Science, in connection with the Canterbury College; and an Agricultural College at Canterbury. Under the Manual and Technical Elementary Instruction Act of 1895, State aid is granted to classes established for the purpose of imparting instruction in such branches of science and art as are encouraged by the Science and Art Department, South Kensington, and the City and Guilds of London Institute. Workshops have been established in connection with some of the public schools, and part of the school day may be given to elementary manual instruction. In connection with the South Kensington Museum and the City and Guilds Institute examinations, 615 passes were secured in 1896. For the financial year ended March, 1897, the expenditure on technical instruction was

£1,928, of which £1,832 represented grants in aid of technical classes. At the three mining schools, the number of students is about 230. There are 43 students at the Canterbury Agricultural College, and 87 at the School of Engineering and Technical Science in connection with the Canterbury College.

General Education.

Striking evidence of the rapid progress made by these colonies in regard to education is afforded by a comparison of the educational status of the people as disclosed by the four census enumerations of 1861, 1871, 1881, and 1891. In those years the numbers who could read and write, read only, and who were unable to read were as follow :—

Degree of Education.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.	Australasia.
1861.								
Read and write	188,543	327,800	17,181	72,207	8,446	48,281	67,998	730,456
Read only	46,024	56,945	3,714	18,629	1,559	13,137	8,922	148,930
Cannot read	116,293	155,577	9,164	35,994	5,585	28,559	22,101	373,273
1871.								
Read and write	296,741	478,572	74,940	115,246	18,703	55,939	177,419	1,217,560
Read only	56,391	70,999	12,080	21,123	2,614	13,945	19,240	196,392
Cannot read	150,849	181,957	33,084	49,257	4,036	29,444	59,734	508,361
1881.								
Read and write	507,067	651,567	136,718	200,057	19,697	74,967	346,228	1,936,301
Read only	49,372	49,535	13,631	15,267	2,429	9,605	27,323	167,162
Cannot read	195,029	161,244	63,176	64,541	7,582	31,133	116,382	639,087
1891.								
Read and write	835,570	908,767	276,381	236,514	34,254	103,138	484,198	2,878,822
Read only	43,536	32,817	14,618	9,571	2,061	6,287	24,902	133,792
Cannot read	244,848	198,821	102,719	74,346	13,467	37,242	117,558	789,001

The figures in the preceding table refer to the total population, and the number of illiterates is therefore swollen by the inclusion of children under school-going age. If the population over 5 years of age be considered in comparison with the total population, the results for the whole of Australasia will be as follow :—

Degree of Education.	Whole Population.				Population over 5 years of age.			
	1861.	1871.	1881.	1891.	1861.	1871.	1881.	1891.
Read and write	730,456	1,217,560	1,936,301	2,878,822	730,339	1,130,145	1,936,111	2,878,813
Read only	148,930	196,392	167,162	133,792	143,908	190,545	161,295	128,445
Cannot read	373,273	508,361	639,087	789,001	168,929	285,286	243,583	262,515
Total	1,252,659	1,922,313	2,742,550	3,801,615	1,043,176	1,605,976	2,340,989	3,269,773

The following table affords a comparison of the number of each class in every 10,000 of the population for the same periods :—

Degree of Education.	Whole Population.				Population over 5 years of age.			
	1861.	1871.	1881.	1891.	1861.	1871.	1881.	1891.
Read and write	5,831	6,334	7,060	7,573	7,001	7,038	8,270	8,804
Read only	1,189	1,022	610	352	1,380	1,186	689	393
Cannot read	2,980	2,644	2,330	2,075	1,619	1,776	1,041	803
Total.....	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000

It will be seen, therefore, that while in 1861 there were only 7,001 persons who could read and write out of every 10,000 people over 5 years of age, the number in 1891 had increased to 8,804, while those who were totally illiterate had in the same period decreased from 1,619 to 803.

Looking at the matter still more closely with reference to age, it will be seen that the improvement in education is most marked in the case of the rising generation. The following table shows the degree of education of all children between the ages of 5 and 15 years in 1861, 1871, 1881, and 1891, numerically and per 10,000:—

Degree of Education.	Total between 5 and 15 years.				Per 10,000 children.			
	1861.	1871.	1881.	1891.	1861.	1871.	1881.	1891.
Read and write	114,353	288,154	482,719	674,012	4,637	5,911	7,058	7,565
Read only.....	68,038	102,316	86,574	69,640	2,759	2,099	1,266	782
Cannot read.....	64,237	96,986	114,654	147,280	2,604	1,990	1,676	1,653
Total.....	246,628	487,456	683,947	890,932	10,000	10,000	10,000	10,000

The proportion of those able to read and write has, therefore, grown from 4,637 to 7,565 in every 10,000 children during the thirty years which the table covers, while the number of those able to read only in 1891 was not much over one-fourth of what it was in 1861, and the wholly illiterate had decreased by more than one-third during the period.

The Marriage Register affords further proof of the advance of education, and it has the further advantage of giving annual data, while the census figures are only available for decennial periods.

The numbers of those who signed the Marriage Register by marks were as appended. Where a blank is shown the information is not available.

Colony.	1861.			1871.			1881.			1891.			1896.		
	Marriages.	Marks.		Marriages.	Marks.		Marriages.	Marks.		Marriages.	Marks.		Marriages.	Marks.	
		M.	F.		M.	F.		M.	F.		M.	F.		M.	F.
New South Wales..	3,222	596	989	3,953	573	768	6,284	347	525	8,457	273	248	8,495	198	173
Victoria.....	4,434	..	..	4,693	342	650	5,896	171	245	8,780	110	133	7,625	56	50
Queensland	320	..	..	970	..	..	1,703	84	169	2,905	88	109	2,823	61	79
South Australia ..	1,158	..	..	1,250	..	..	2,308	100	159	2,315	40	49	2,183	25	38
Western Australia.	149	..	..	159	..	..	197	..	..	413	..	..	1,077	33	31
Tasmania	717	..	..	598	..	..	856	..	..	988	..	..	964	53	43
New Zealand	878	..	..	1,864	..	..	,279	105	190	3,895	53	64	4,843	30	34
Australasia	10,878	..	..	13,487	..	..	20,523	..	..	27,663	..	..	28,010	456	448

The percentages for those colonies for which the necessary information is available are worked out in the following table :—

Year.	Males.	Females.	Total.
1861	18·50	30·69	24·60
1871	10·58	16·40	13·49
1881	4·14	6·61	5·38
1891	2·12	2·27	2·20
1896	1·63	1·60	1·61

The percentage in 1896 was, therefore, less than one-fifteenth of that in 1861, and there is every reason to expect that in the course of another few years it will be still further diminished.

The wonderful increase which has taken place in the quantity of postal matter carried points indirectly to the spread of education. The following table shows that while in 1851 only 2,165,000 letters and post-cards and 2,150,000 newspapers passed through the Australasian Post-offices, these numbers had in 1896 increased to 201,264,900 and 113,613,000 respectively :—

	Letters and Post-cards.	Newspapers.
1851	2,165,000	2,150,000
1861	14,061,000	10,941,400
1871	30,435,300	17,252,700
1881	80,791,700	43,802,000
1891	183,694,900	95,879,760
1896	201,264,900	113,613,000

The following are the numbers of letters and newspapers per head of population in each of the six years mentioned :—

	Letters per Inhabitant.	Newspapers per Inhabitant.
1851	4·7	4·7
1861	11·3	8·8
1871	15·7	8·9
1881	29·1	15·8
1891	47·8	24·9
1896	47·0	26·5

In 1896 the number of letters per inhabitant was ten times, and that of newspapers more than five and a half times, larger than in 1851.

Public Libraries.

In all the colonies public libraries have been established. The Public Libraries in Melbourne and Sydney are splendid institutions, the former comparing favourably with many of the libraries in European capitals. The following table shows the number of libraries which furnished returns, and the number of books belonging to them, for the latest year for which information is available :—

	No. of Libraries.	No. of Books.
New South Wales	324	510,000
Victoria	424	1,029,743
Queensland	86	129,883
South Australia	156	242,189
Western Australia	25	34,558
Tasmania	40	78,075
New Zealand	304	409,604
Australasia	1,359	2,434,052

In Western Australia, there are 17 Agricultural Halls, 13 Mechanics' Institutes, 5 Miners' Institutes, and 6 Miscellaneous Institutes, as well as 8 Associations meeting in rented premises. The returns, which were collected for the first time in 1896, show that 39 of these institutions were possessed of libraries, containing approximately 19,548 volumes. The Victoria Public Library in Perth, a Government institution, possesses 15,010 volumes.

SOCIAL CONDITION.

FROM very early days the Australasian colonies have been regarded somewhat in the light of a working-man's paradise, the high rates of wages which have generally prevailed and the cheapness of food permitting the enjoyment of a great degree of comfort, if not of luxury, by a class which elsewhere knows little of the one and nothing of the other; and even in these times of trade depression and reduced wages it may safely be said that the position of the wage-earner in Australia is equal to that occupied by him in any other part of the world. Although a high standard of living is not conducive to thrift, saving has gone on with great rapidity, notwithstanding the checks which it has received from time to time from adverse conditions of the labour market. Some idea of the rate and extent of this accumulation of wealth may be obtained from the tables showing the growth of deposits with banks. The banking returns, however, afford in themselves but an incomplete view of the picture; it should also be regarded from the standpoint of the expenditure of the people. Both of these subjects are dealt with in their proper places in this volume, and these evidences of the social condition of the people need not, therefore, be further considered here.

Newspapers and Letters.

Few things show more plainly the social superiority of a civilized people than a heavy correspondence and a large distribution of newspapers. In these respects all the colonies of Australasia have for many years been remarkable. In proportion to population it is doubtful whether any country in the world can boast of a larger number or a better class of newspapers than they publish. Great advances have been made in this respect since 1871, and the rate of progress, both in number and in excellence of production, has been even more rapid between 1881 and the present time. There are no means of correctly estimating the number of newspapers actually printed and distributed in the colonies, because the Post-office carries but a small proportion of the circulation. For purposes of comparison with other countries, however, it may be stated that during the year 1896 no less than 113,613,000 newspapers passed through the Post-offices of the various colonies, giving the large proportion of 26·5 per head of population. In the same year the number of letters and post-cards carried was 201,264,900, being 47 for every person in Australasia. An examination of the statistics of other countries shows that these colonies stand

third among the countries of the world in the transmission of correspondence, being only exceeded by the United Kingdom and the United States of America per head of population.

Parks, Museums, and Art Galleries.

All the Australasian capitals are liberally supplied with parks and recreation-grounds. In Sydney and suburbs there are parks, squares, and public gardens comprising an area of 3,131 acres, including 530 acres which form the Centennial Park. Then there is the picturesque National Park, of 36,320 acres, situated about 16 miles from the centre of the metropolis; and, in addition to this, an area of 35,300 acres, in the valley of the Hawkesbury, has been recently reserved for public recreation under the name of Ku-ring-gai Chase. Thus Sydney has two extensive and picturesque domains for the enjoyment of the people at almost equal distances north and south from the city, and both accessible by railway. Melbourne has about 5,400 acres of recreation-grounds, of which about 1,750 acres are within the city boundaries, 2,850 acres in the suburban municipalities, and 800 acres outside those municipalities. Adelaide is surrounded by a broad belt of park lands, and also contains a number of squares within the city boundaries, covering altogether an area of 2,300 acres. Brisbane, Hobart, Perth, and the chief cities of New Zealand are also well provided for in this respect. In all the colonies large areas of land have been dedicated as public parks. There are fine Botanic Gardens in Sydney, Melbourne, Brisbane, Adelaide, and Hobart, which are included in the areas above referred to. Each of these gardens has a special attraction of its own. They are all well kept, and reflect great credit upon the communities to which they belong.

The various capitals of the colonies, and also some of the prominent inland towns, are provided with museums for the purposes of instruction as well as recreation; and in Sydney, Melbourne, Brisbane, Adelaide, and Hobart there are art galleries containing excellent collections of paintings and statuary. All these institutions are open to the public free of charge.

Public Charities.

One of the most satisfactory features of the social condition of the Australian communities is the wide distribution of wealth, and the consequently small proportion of people who are brought within the reach of want. In the United Kingdom, the richest country of Europe, only nine out of every hundred of the population possess property of the value of £100, while in Australasia the number is not less than fifteen, and the violent contrast between the rich and the poor which blots the civilization of the old world is not observable in these young states. It is, unfortunately, only too plain that a certain amount of poverty does exist in the colonies; but there is a complete absence of

an hereditary pauper class, and no one is born into the hopeless conditions which characterize the lives of so many millions in Europe, and from which there is absolutely no possibility of escape. No poor rate is levied in Australasia, the assistance granted by the State being usually tendered to able-bodied men who find themselves out of employment in times of depression, and taking the form of payment, in money or in rations, for work done by them.

The chief efforts of the authorities, as regards charity, are directed towards the rescue of the young from criminal companionship and temptation to crime, the support of the aged and infirm, the care of the imbecile or insane, and the subsidising of private institutions for the cure of the sick and injured and the amelioration of want. Even where the State grants aid for philanthropic purposes the management of the institutions supervising the expenditure is in private hands, and in addition to State-aided institutions there are numerous charities wholly maintained by private subscriptions, whose efforts for the relief of those whom penury, sickness, or misfortune has afflicted are beyond all praise.

The rescue of the young from crime is attempted in two ways—first, by means of Orphanages, Industrial Schools, and Reformatories, which take care of children who have been abandoned by their natural guardians, or who are likely, from the poverty or incapacity of their parents, to be so neglected as to render them liable to lapse into crime; and second, by sequestering children who have already committed crime, or whose parents or guardians find themselves unable to control them.

Although a century has elapsed since settlement commenced in Australasia, its resources are by no means developed, and very many men are at work far away from the home comforts of everyday life, and from home attendance in case of sickness or injury. Hospitals are therefore absolutely essential under the conditions of life in the rural districts of the colonies, and they are accordingly found in every important country town. Below will be found the number of hospitals in each colony, with the number of indoor patients treated during 1896, and the total expenditure for the same year. Unfortunately, the South Australian returns are defective, as will be seen by the note appended to the table :—

Colony.	Hospitals.	Indoor patients treated.	Expenditure.
	No.	No.	£
New South Wales	107	26,697	133,085
Victoria	52	23,140	137,751
Queensland	59	16,420	102,952
South Australia	8	*2,633	*14,890
Western Australia	21	4,143	17,469
Tasmania	10	2,522	12,050
New Zealand	39	10,660	96,379
Australasia	296	86,215	514,576

* Adelaide Hospital only.

All the colonies possess institutions for the care of the insane, which are under Government control. The treatment meted out to the inmates is that dictated by the greatest humanity, and the hospitals are fitted with all the conveniences and appliances which modern science points out as most calculated to mitigate or remove the affliction from which these unfortunate people suffer. The following table shows the number of insane patients under treatment in the asylums of each colony in 1896, the total expenditure on hospitals for the insane during the year, and the average expenditure per inmate under treatment. The question of insanity is treated farther on in this chapter :—

Colony.	Insane Patients under treatment.	Total Expenditure.	Average Expenditure per Inmate under treatment.
	No.	£	£ s. d.
New South Wales	4,591	103,928	22 12 9
Victoria	4,841	96,744	19 19 8
Queensland	1,884	39,154	20 15 8
South Australia	1,125	21,459	19 1 6
Western Australia	249	6,948	27 17 8
Tasmania	412	8,145	19 15 5
New Zealand	2,680	50,972	19 0 5
Australasia	15,782	327,350	20 14 10

The amounts expended on Destitute Asylums and Benevolent Societies cannot be separated from other items of expenditure in some of the colonies. As far as they can be ascertained they are given in the following table, together with the number of inmates of the various asylums at the end of 1896, except in the case of Victoria, for which colony the returns are made out to the 30th June of that year :—

Colony.	Inmates.	Expenditure.
	No.	£
New South Wales	8,581	145,253
Victoria	7,650	104,385
Queensland	1,981	39,953
South Australia	1,706	28,991
Western Australia	506	13,843
Tasmania	1,258	7,593
New Zealand	3,702	89,669
Australasia	25,384	429,687

A liberal amount of out-door relief is given in all the Australasian colonies, the expenditure on which is included in the amounts given for Destitute Asylums and Benevolent Societies. The expenditure of the Governments of the Australasian colonies in connection with all forms of relief and in aid of hospitals and other charitable institutions, so

far as is shown by the imperfect returns, amounted in 1896 to about £600,000; adding to this the amount of private subscriptions, the poor and the unfortunate have benefited during the year to the extent of over £1,000,000. This sum, though not excessive in proportion to the population, may yet appear large in view of the general wealth of the colonies, which should preclude the necessity of so many seeking assistance; and there is the risk that the charitable institutions may encourage the growth of the pauper element, for while free quarters and free food are so accessible those who are disinclined to work are tempted to live at the public expense.

Crime.

In all the colonies proceedings against a person accused of an offence may be initiated either by the arrest of the culprit or by summoning him to appear before a magistrate. Serious offences, of course, are rarely dealt with by process of summons; but, on the other hand, it is not uncommon for a person to be apprehended on a very trivial charge, and this circumstance should not be forgotten in dealing with arrests by the police, which are unusually numerous in some of the colonies. Unfortunately, it is not easy to say how far the police of one colony are disposed to treat offenders with such consideration as to proceed against them by summons, and how far those of another colony are content to adopt similar action; for in most of the provinces the records do not draw a distinction between the two classes of cases; and in the table given on page 108, showing the number of persons charged before magistrates in each colony during the year 1896, offenders who were summoned to appear are included with those arrested, except in the case of Victoria, whose criminal statistics seem to deal only with arrests. It is likewise difficult to make a true comparison between the various colonies in the matter of the prevalence of crime, for there are a number of circumstances which must considerably affect the criminal returns and modify their meaning. The first of these, of course, is the question of the strength of the police force and its ability to cope with lawlessness, which must be decided chiefly by the proportion of undetected crime which takes place in the colonies. The policy adopted by the chief of police in regard to trivial breaches of the public peace and other minor offences against good order must also be taken into consideration; and then there are considerable differences between the criminal codes of the colonies, and in the number of local enactments, breaches of which form a large proportion of the minor offences taken before the Courts. Also, when the returns of the lower Courts are laid aside and the convictions in superior Courts taken up, the comparison is affected by the jurisdiction of the magistrates who committed the prisoners. In New South Wales, for example, the jurisdiction of the lower Courts is limited to imprisonment for six months, except in regard to cases brought under one or two Acts of Parliament, such as the Chinese Restriction Act, prosecutions under which are very few;

while in Victoria a large number of persons are every year sentenced in Magistrates' Courts to imprisonment for terms ranging from six months to three years. It is apparent, therefore, that in any comparison drawn between the number of convictions in the superior Courts of New South Wales and of Victoria, the former colony must appear to great disadvantage.

An investigation into the differences between the law of New South Wales and of Victoria in respect to the jurisdiction of magistrates discloses some important results. Under the Victorian Crimes Act of 1890, 54 Victoriæ No. 1,079, it is provided by section 67 that Justices may try persons under sixteen years of age for the offence of simple larceny or for any offence punishable as simple larceny no matter what the value of the property in question may be, and persons over sixteen years of age where the property said to have been stolen is not of greater value than £2; and it is further provided by the same section that if upon the hearing of such a charge the Justices shall be of opinion that there are circumstances in the case which render it inexpedient to inflict any punishment, they shall have power to dismiss the charge without proceeding to a conviction. This provision, it is needless to say, is likely to materially reduce the number of convictions for larceny in Victoria. In New South Wales, on the other hand, the law does not give Justices any such power. In every case where the offence is proved they must convict the accused person, although in the case of offenders under the age of sixteen years they may discharge the convicted person on his making restitution, or in other cases deal with him under the First Offenders' Act and suspend the sentence; but in all such cases the conviction is placed on record and is accounted for in the criminal statistics of the colony. Section 69 of the same Victorian Act gives Justices power to deal with any case of simple larceny, or of larceny as a clerk or servant, or of stealing from the person, when the accused pleads guilty, the punishment being imprisonment for any term not exceeding twelve months; while in New South Wales the law does not give Justices the power to deal with such cases when the property alleged to have been stolen exceeds the value of £20. This section must therefore tend to materially reduce the number of cases committed for trial in Victoria for the offences mentioned, although in all such cases the Justices may commit the accused person if they think fit to do so. Furthermore, it is provided by section 370 of the Crimes Act of 1890 that suspected persons who have been convicted of capital or transportable felony elsewhere and are found in Victoria may be arrested and sentenced to imprisonment for three years in the case of a male, and for one year in the case of a female. Such a protective provision is in force in some of the other provinces as well as in Victoria, and its absence in New South Wales has made that colony the chosen refuge of many of the criminals of the other colonies; for there they may lay their plots in peace and enjoy immunity from arrest until the police discover some proof of their complicity in fresh crime or can charge them

with being in possession of property which may reasonably be regarded as having been stolen. It is not, however, only in respect to serious offences that the law of Victoria differs from that of New South Wales, for under the Victorian Police Offences Act of 1890 drunkenness in itself is no crime, and must be allied with disorderly conduct before the person may be punished. These statements all go to show in what important respects the criminal statistics of the colonies must differ from each other; and an investigation as to the state of the criminal law of the various colonies is proceeding, in order to see how far the differences modify the criminal statistics.

During the year 1896, as far as can be gathered, 141,434 persons were charged before magistrates in Australasia, 106,192 being summarily convicted and 31,669 discharged, while 3,573 were committed. The returns of each of the seven colonies will be found below. It should be explained that in the case of New Zealand and Western Australia each charge is counted as a separate person—a proceeding which, of course, tells against those colonies; while in Victoria the returns only deal with arrested persons, no record being published of the summons cases dealt with in that colony :—

Colony.	Persons charged.	Summarily dealt with.		Committed.
		Discharged.	Convicted.	
New South Wales.....	56,498	9,671	45,493	1,334
Victoria	22,787	7,353	14,759	675
Queensland.....	18,692	3,521	14,681	490
South Australia.....	6,810	1,374	5,234	202
Western Australia ...	13,318	4,619	8,426	273
Tasmania	4,514	994	3,450	70
New Zealand	18,815	4,137	14,149	529
Australasia.....	141,434	31,669	106,192	3,573

Taking the whole of Australasia, rather more than thirty-three persons out of every thousand were charged before magistrates during the year 1896—a figure which compares favourably with the rates for previous years. Only three colonies—Western Australia, New South Wales, and Queensland—exceed the average amount of disorder and crime as disclosed by the police court returns. The very large proportion of adult males to the population of the former colony, and its present industrial conditions, place it, of course, in quite an exceptional position; while in Queensland and New South Wales there are greater floating populations, from the ranks of which a large percentage of offenders is drawn, than in the other colonies which have better records. The province with the least disorder and crime is South Australia, where the persons answering to charges in the lower Courts only form 18·98 per

thousand of the population. Next come Victoria with 19·34 per thousand; New Zealand, with 26·63; and Tasmania, with 27·61; while, as before stated, Western Australia, New South Wales, and Queensland have the highest proportions, namely, 111·36, 43·87, and 40·08 per thousand respectively. In the case of Western Australia, the returns leave little doubt that there has been a large influx of criminals from the eastern colonies. The following table shows the proportion of persons charged before magistrates in each colony during the year; also the percentages of the persons discharged, convicted, and committed to the whole number charged:—

Colony.	Persons charged per 1,000 of population.	Percentages of total persons charged.			
		Discharged.	Convicted.	Summarily dealt with.	Committed.
New South Wales	43·87	17·12	80·52	97·64	2·36
Victoria	19·34	32·27	64·77	97·04	2·96
Queensland	40·08	18·84	78·54	97·38	2·62
South Australia.....	18·98	20·18	76·86	97·04	2·96
Western Australia	111·36	34·68	63·27	97·95	2·05
Tasmania	27·61	22·02	76·43	98·45	1·55
New Zealand	26·63	21·99	75·20	97·19	2·81
Australasia.....	33·04	22·39	75·08	97·47	2·53

It will be seen from the above table that out of every hundred persons charged before magistrates in Australasia in 1896, 97·47 were summarily dealt with, 22·39 being discharged and 75·08 convicted, while only 2·53 were committed to higher courts. The colony with the highest percentage of cases summarily disposed of and the smallest proportion of committals was Tasmania; while in Victoria, although the magistrates there have a much wider jurisdiction than in New South Wales and some of the other colonies, the lowest proportion of cases summarily dealt with was shared with South Australia. This was without doubt due to the fact that, as already pointed out, summons cases, which usually cover minor offences, are not included in the criminal statistics of the colony. As a matter of fact, the Victorian returns should show a very high percentage of cases summarily disposed of; for an inspection of the statistics discloses the fact that, owing to this wider jurisdiction, the magistracy of the colony, in 1896, sentenced 8 persons to two years' imprisonment, 156 to periods between one year and two years, and 311 to terms of six months and under one year. Many of these persons, had they been tried in New South Wales, would have been convicted in higher courts. Another important point to be noted is that, next to Western Australia, Victoria has the largest proportion of discharges, and if the theory be dismissed as untenable that the police in that colony are more prone to charge persons on insufficient grounds than in the other colonies, it must be concluded that the magistrates of Victoria

deal more leniently with accused persons than is the case elsewhere; indeed, it has already been shown that the Crimes Act of 1890 provides for the discharge without conviction of persons found guilty of certain offences. The lowest proportion of discharges is to be found in New South Wales, which also has the highest percentage of summary convictions; and the figures testify to the stringency with which the criminal laws are administered in the colony.

Of the 141,434 persons brought before magistrates during the year 1896, only 19·2 per cent. were charged with offences which can fairly be classed as criminal, the overwhelming majority being accused of drunkenness and other offences against good order, of lunacy and vagrancy, and of breaches of Acts of Parliament, which have a tendency to multiply to a great extent. For present purposes the accused persons may be divided as in the table given below, offences against the person and against property being regarded as serious crime. Of course, amongst the other offenders are to be found a few charged with grave misdemeanours, but against these may be put trivial assaults, which are included with crimes against the person :—

Colony.	All Offenders.	Serious Offenders.			Minor Offenders.
		Against the Person.	Against Property.	Total.	
New South Wales	56,498	4,195	6,462	10,657	45,841
Victoria	22,787	1,002	2,856	3,858	18,929
Queensland	18,692	1,936	2,141	4,077	14,615
South Australia	6,810	407	800	1,207	5,603
Western Australia	13,318	1,010	1,591	2,601	10,717
Tasmania	4,514	341	844	1,185	3,329
New Zealand	18,815	1,302	2,275	3,577	15,238
Australasia	141,434	10,193	16,969	27,162	114,272

This examination into the nature of the offences explains in some measure the comparatively unfavourable position of New South Wales as shown by the previous tables; for of the 56,498 accused persons in that colony, the minor offenders numbered 45,841, or 81·1 per cent. No doubt the large number of trivial cases in New South Wales is accounted for by the greater strictness of police administration. Victoria actually shows 83·1 per cent. of minor offenders, but in consequence of a difference in the tabulation of the returns its position is not nearly so favourable as it appears to be on the surface. In New South Wales, and, it is to be presumed, in most of the other colonies, a person accused of two or more offences is entered as charged with the most serious in the eyes of the law, while in Victoria he is entered as charged with the first offence committed, any others, however serious, arising out of his capture, being left out of consideration. For

example, if a person is arrested for drunkenness, and he assaults his captors while on the way to the station, he is entered in the returns of New South Wales, as they are here presented, as charged with an offence against the person, and thereby helps to swell the amount of serious crime; but in Victoria he is entered as charged with drunkenness and disorderly conduct, and the charge of assault, on which he may be convicted and sentenced to a term of imprisonment, is not disclosed. This fact must therefore be taken into account in comparing the proportions of the various classes of offenders per thousand of population, which are appended :—

Colony	Per thousand of population.				
	All Offenders.	Serious Offenders.			Minor Offenders.
		Against the Person.	Against Property.	Total.	
New South Wales	43·87	3·26	5·02	8·28	35·59
Victoria	19·34	0·85	2·42	3·27	16·07
Queensland	40·08	4·15	4·59	8·74	31·34
South Australia	18·98	1·13	2·23	3·36	15·62
Western Australia	111·36	8·44	13·31	21·75	89·61
Tasmania	27·61	2·09	5·16	7·25	20·36
New Zealand	26·63	1·84	3·22	5·06	21·57
Australasia	33·04	2·38	3·96	6·34	26·70

It will be seen that, relatively to population, the colony with the largest number of serious offenders was Western Australia, which had a proportion of 21·75 per thousand of population. Queensland followed with a proportion of 8·74, while New South Wales and Tasmania occupied third and fourth positions with 8·28 and 7·25 per thousand respectively, the former having the largest proportion of offences against the person, and the latter against property. The rate of New Zealand was 5·06 per thousand, while that of South Australia is set down at 3·36, and Victoria closes the list with 3·27. It would be interesting to compare the crime of the principal colonies on the basis of the number of males of such ages as contribute to the ranks of offenders; but this cannot accurately be done at the present time, in consequence of the changes which have taken place in the composition of the people since the last census. In explanation of the position of Western Australia, it is well known to the police of Victoria and New South Wales—and, indeed, the fact is proved by the records of the prisoners received into Fremantle gaol—that a large number of criminals have left those colonies for the west during the last few years.

About one-third of the minor offenders of Australasia are charged with drunkenness. From the table given below it will be seen that in

all the colonies 47,578 cases of drunkenness were heard during the year 1896, convictions being recorded in 41,649 cases, or 87·5 per cent. of the total number. The colony with the highest number of cases relatively to population was Western Australia, the rate of which was 29·2 per thousand persons, followed by New South Wales with 15·1, Queensland with 13·1, and Victoria with 9·3, while Tasmania was last with a rate of only 4·0 per thousand. The figures for Victoria, however, only refer to apprehensions, information respecting persons summoned to answer a charge of drunkenness not being available, while, as already pointed out, drunkenness in itself is not a crime in that colony, but must be aggravated by disorderly conduct. In the case of Western Australia, it must be remembered that the proportion of adult male population is very high. From the figures showing the number of convictions, it will be seen that the magistrates of that colony and of Victoria take a somewhat lenient view of this offence, and only record convictions in about 65 and 60 per cent. of the cases respectively, while in the other colonies the percentage ranges from 93·3 to 99·4 :—

Colony.	Charges of Drunkenness.	Convictions.		Per 1,000 persons.	
		Total.	Percentage of Charges.	Charges.	Convictions.
New South Wales	19,499	19,385	99·4	15·1	15·0
Victoria	10,960	6,594	60·2	9·3	5·6
Queensland	6,105	6,069	99·4	13·1	13·0
South Australia	1,949	1,896	97·3	5·4	5·3
Western Australia	3,491	2,269	65·0	29·2	19·0
Tasmania	658	614	93·3	4·0	3·8
New Zealand	4,916	4,822	98·1	7·0	6·8
Australasia	47,578	41,649	87·5	11·1	9·7

But a return showing only the number of cases of drunkenness is not a safe index of the abuse of alcoholic liquors, for a great deal depends on the state of the law and the manner in which it is administered, and it is evident that the maintenance of the law intended to preserve public decency will always be less strict in sparsely-settled country districts than in larger centres of population where the police are comparatively more numerous, if not in proportion to the population, at least in proportion to the area they have under their supervision. The quantity of intoxicants consumed per head is perhaps a safer index of the habits of communities living under like conditions; but comparisons so based should not be pushed to extremes, for, as has often been pointed out, the larger part of the alcohol which enters into consumption is that consumed by the population who are not drunkards. The average quantity of intoxicants used in each colony during 1896 is given below, wines and beer being reduced to their equivalent of proof spirit. The

consumption of the various kinds of intoxicants will be found in the chapter on "Food Supply and Cost of Living":—

Colony.	Proof Gallons of Alcohol per head of population.
New South Wales	2·10
Victoria	2·62
Queensland	2·69
South Australia	2·18
Western Australia	5·37
Tasmania	1·34
New Zealand	1·60
Australasia	2·29

These figures show the importance which must be attached to police administration when studying the question of drunkenness. The strength of the police force in each of the colonies at the end of 1896 is given below :—

Colony.	Police.			Inhabitants to each Police Officer.	Area to each Constable in Country Districts.
	Metropolitan.	Country.	Total.		
	No.	No.	No.	No.	Sq. miles.
New South Wales	749	1,125	1,874	687	276
Victoria	680	732	1,412	835	120
Queensland	163	641	804	580	1,043
South Australia	160	209	369	972	4,323*
Western Australia	87	351	438	273	2,780
Tasmania	43	218	261	627	120
New Zealand	54	463	517	1,366	226

* Including Northern Territory.

The record of cases heard before a Court of Magistrates cannot be regarded as altogether a trustworthy indication of the social progress of Australasia, because, as has been pointed out, it includes many kinds of offences which cannot fairly be classed as criminal, and the number of these has a tendency to increase with the increase of local enactments. The committals for trial, taken in conjunction with the convictions for crime in the Superior Courts, may be regarded as much more conclusive on the question of the progress of society or the reverse. In some respects even this evidence is misleading, for, as already shown, in the less populous provinces there are no Courts intermediary between the Magistrates' and the Supreme Courts, so that many offences which in New South Wales, for example, are tried by a jury are in some of the other provinces dealt with by magistrates, and even in Victoria, where there are Courts of General Sessions, magistrates have a much wider jurisdiction

than in New South Wales. But for the purpose of showing the decrease in serious crime in Australasia as a whole the proportion of committals and of convictions in Superior Courts may fairly be taken, and this information is given below. It will be seen that during the thirty-five years from 1861 to 1896 the rate of committals per thousand of population has dropped from 2·2 to 0·8, and of convictions from 1·3 to 0·5 :—

Year.	Per 1,000 of Population.	
	Committals.	Convictions in Superior Courts.
1861	2·2	1·3
1871	1·4	0·8
1881	1·2	0·7
1891	1·1	0·6
1896	0·8	0·5

In noting these facts and comparing the results with those obtained in Great Britain during the same period, it must not be forgotten that some of the provinces of Australasia have been compelled gradually to reform a portion of their original population, and that in the case of colonies such as Victoria and Queensland, not originally peopled in any degree by convicts, the attractions of the gold-fields have drawn within their borders a population by no means free from criminal instincts and antecedents. Viewed in this light, the steady progress made cannot but be regarded as exceedingly satisfactory, and the expectation may not unreasonably be entertained that the same improvement will be continued until the ratio of crime to population will compare favourably with that of any part of the world.

Below will be found the number of convictions in the Superior Courts of each colony, at decennial periods from 1861 to 1891, as well as for the year 1896 :—

Colony.	1861.	1871.	1881.	1891.	1896.
New South Wales	437	628	1,066	964	879
Victoria	846	511	332	729	424
Queensland	24	91	92	232	256
South Australia	62	91	213	90	131
Western Australia	35	65	61	44	177
Tasmania	127	74	51	63	35
New Zealand	100	162	270	276	291
Australasia	1,631	1,622	2,085	2,398	2,193

The following table gives a classification of the offences for which the accused persons were convicted during 1896 ; also the rate of convictions

and of committals per 1,000 of population. It will be seen that the rate of convictions in the Superior Courts of Victoria is 0·36 per thousand; but if the persons who received sentences of over six months' imprisonment at the hands of magistrates were taken into account, the proportion would be as high as that of New South Wales. The colony of Tasmania has an even smaller proportion of convictions in Superior Courts than Victoria, and South Australia is but slightly higher, but in those two provinces, as already pointed out, no intermediate Courts exist :—

Colony.	Convictions in Superior Courts.					Committals per 1,000 of Population.
	Classification of Offences.			All Convictions.	Per 1,000 of Population.	
	Against the Person.	Against Property.	Other.			
New South Wales	181	611	87	879	0·68	1·04
Victoria	88	300	36	424	0·36	0·57
Queensland	68	168	20	256	0·55	1·05
South Australia	11	115	5	131	0·37	0·56
Western Australia.....	66	109	2	177	1·48	2·28
Tasmania.....	11	22	2	35	0·21	0·43
New Zealand	36	242	13	291	0·41	0·75
Australasia	461	1,567	165	2,193	0·51	0·83

There is no doubt that New South Wales would appear to much greater advantage in a comparison of crime statistics if there existed in that colony any law preventing the entrance of criminals, such as is rigidly enforced in most of the other provinces. In the absence of such a protective measure, the mother colony has become a happy hunting-ground for the desperadoes of Australasia. That there is ground for this assertion is shown by the fact that whereas in New South Wales offenders born in the colony only formed 34 per cent. of the total apprehensions in 1896, in Victoria 45 per cent. of arrested persons were of local birth; while at the census of 1891 the element of the population of local birth was larger in the former than in the latter colony.

The punishment of death is very seldom resorted to except in cases of murder, though formerly such was not the case. Thus the number of executions has steadily fallen from 151 during the decade 1841–50 to 66 during the ten years 1881–90. In South Australia the extreme penalty has been most sparingly inflicted, there having been only 10 executions in the twenty-six years which closed with 1896. The following table shows the number of executions in each province during each decade of the 50 years ended 1890, also those which took place in 1891–95 and 1896. Queensland was incorporated with New South Wales until the end of 1859, though Victoria became a separate colony

in 1851. It will be noticed that the returns are defective so far as Western Australia is concerned :—

Colony.	1841-50.	1851-60.	1861-70.	1871-80.	1881-90.	1891-95.	1896.
New South Wales...	68	38	34	27	23	15	1
Queensland.....			14	18	15	16	...
Victoria		47	41	19	13	12	1
South Australia.....	.....	7	12	6	2	2	...
Western Australia..	.....	.....	.....	.....	.....	6	2
Tasmania	83	32	15	3	5	1	...
New Zealand.....	.....	.....	.....	12	8	1	...
Total	151	124	116	85	66	53	4

The returns relating to the prisons of the colonies are in some cases very incomplete. The prisoners in confinement at any specified time may be divided into those who have been tried and sentenced, those who are awaiting their trial, and debtors. The returns of four of the colonies allow of this distinction being made. The number and classification of prisoners in confinement on the 31st December, 1896, were as follow :—

Colony.	Tried and Sentenced.	Awaiting Trial.	Debtors.	Total.
New South Wales.....	2,216	138	3	2,357
Queensland	568	37	.....	605
South Australia	120*	4	.....	124
New Zealand.....	503	55	2	560
Total	3,407	234	5	3,646

* Including debtors.

The returns of Victoria and Tasmania do not enable the distinction made in the foregoing table to be drawn, but they give the total number of prisoners in confinement on the 31st December, 1896, as 1,238 and 137 respectively, while Western Australia records a daily average of 457. Taking the figure just mentioned to be correct for the end of the year, there was a prison population in Australasia of 5,478, or about 1·27 in every thousand of the population.

Suicides.

Suicide would unfortunately appear to be increasing in proportion to population, as well as in actual number of cases, since 1871. It is believed that the actual number of suicides is even larger than is shown in the tables, especially during recent years; for there is a growing

disposition on the part of coroners' juries to attribute to accident what is really the result of an impulse of self-destruction. The following table indicates a portion of the past history and present position of the colonies in this respect :—

Colony.	1861.	1871.	1881.	1891.	1896.	Average 10 years. 1887–96.
New South Wales	45	30	83	119	182	138
Victoria	64	90	102	119	116	128
Queensland	*	8	30	73	70	66
South Australia	13	11	34	31	31	29
Western Australia	1	*	4	6	25	12
Tasmania	7	4	6	9	13	12
New Zealand	*	*	42	56	70	61
Australasia { Total	130	143	301	413	507	446
Australasia { Per 100,000 of population	13·0	8·4	10·9	10·6	11·8	11·3

* Information not available.

Compared with the total number of deaths and the mean population, suicides in the Australasian colonies during the last ten years (1887–96) show the following proportions per 100,000 :—

Colony.	Per 100,000 Deaths.	Per 100,000 Inhabitants.
New South Wales	922	11·8
Victoria	766	11·3
Queensland	1,207	15·9
South Australia	730	8·7
Western Australia	1,183	17·5
Tasmania	567	7·7
New Zealand	960	9·4
Australasia	881	11·3

Tasmania, therefore, stands in a more favourable position than any of the other colonies, and is the only colony in which the rate is less than in England, where deaths by suicide average only 8 per 100,000 of population. Compared with the rates of some European countries, however, that of Australasia is small, for during the period 1887–91 the average number of suicides per 100,000 of population was, in Denmark, 25·3 ; in France, 21·8 ; in Switzerland, 21·6 ; Prussia, 19·7 ; Austria, 15·9 ; Belgium, 12·2 ; Sweden, 11·9 ; Bavaria, 11·8 ; England, 8·0 ; Norway, 6·6 ; Holland, 5·8 ; Scotland, 5·6 ; Italy, 5·2 ; and Ireland, 2·4. It is the general experience that suicide is increasing.

Illegitimacy.

The following figures show the number of births of illegitimate children, and the total number of births, in each of the seven colonies during the years 1871, 1881, 1891, and 1896 :—

Colony.	1871.		1881.		1891.		1896.	
	Illegitimates.	Total Births.	Illegitimates.	Total Births.	Illegitimates.	Total Births.	Illegitimates.	Total Births.
New South Wales...	782	20,143	1,263	28,993	2,115	39,458	2,445	36,506
Victoria	747	27,382	1,382	27,145	2,064	38,505	1,812	32,178
Queensland	156	5,205	345	8,220	684	14,715	732	14,017
South Australia	*	7,082	*	10,708	315	10,737	346	10,048
Western Australia...	*	760	*	1,005	*	1,786	156	2,782
Tasmania.....	*	3,053	*	3,918	185	4,971	272	4,603
New Zealand	*	10,592	534	18,732	638	18,273	834	18,612
Australasia	1,685	74,217	3,524	98,721	6,001	128,445	6,597	118,746
Per cent. of births...	3·19	.....	4·24	.....	4·74	.....	5·56	.....

* Information not available.

It will be seen from the above figures that illegitimacy is increasing in Australasia. The highest rate in the seven colonies is found in New South Wales, followed by Victoria, Western Australia, and Queensland. For the ten years 1887–96 the average rate of illegitimacy in each of the provinces was as stated below. In South Australia the proportion of illegitimate births is not quite half that of New South Wales :—

Colony.	Illegitimate Births. Per cent.
New South Wales.....	5·70
Victoria	5·25
Queensland.....	4·75
South Australia.....	2·84
Western Australia	4·90
Tasmania.....	3·39
New Zealand	3·56

The average rate for the whole of Australasia was 4·81 per cent. of the total births. This is much lower than the Scottish rate; but it is higher than the rates for England and Wales, Ireland, and the United Kingdom as a whole—the proportion for the ten years 1887–96 being 4·39 per cent. in England and Wales; 7·59 per cent. in Scotland; 2·47 per cent. in Ireland; and 4·54 per cent. in the United Kingdom. Further, while illegitimacy is increasing in Australasia, it has been steadily diminishing in the United Kingdom for a long number of years. An interesting comparison of illegitimacy in foreign countries

is afforded by the table given below, the rates being based on the number of births during a period of five years :—

Country.	Illegitimate Births per cent.	Country.	Illegitimate Births per cent.
Servia	1·00	Belgium	8·75
Netherlands	3·20	German Empire	9·23
Switzerland	4·63	Denmark	9·43
Roumania	5·75	Wurtemberg	10·03
Finland	6·42	Sweden	10·23
Italy	7·30	Portugal	12·21
Norway	7·33	Saxony	12·45
Prussia	7·81	Bavaria	14·01
France	8·41	Austria	14·67
Hungary	8·61		

With the exception of Denmark, Norway, and Switzerland, illegitimacy is increasing in all the countries included in this table.

Divorce.

The question of divorce is one of much interest to Australasia, especially as some of the colonies now offer great facilities for the dissolution of the marriage bond. The general opinion was that such facilities were calculated to increase divorce to an extent that would prove hurtful to public morals ; and so far as the experience of New South Wales was concerned, for the first few years after the passing of the Act multiplying the grounds on which divorce could be granted, the fear did not seem to be altogether groundless ; for in 1893 the number of decrees *nisi* granted rose to 304, in 1894 it was 369, and in 1895 it was still as high as 302. When, however, it is remembered that advantage would be taken of the change in law to dissolve marriages the bonds of which would have been broken long before under other circumstances, it is evident that there was little ground for the fear that this somewhat alarming increase would continue, and it was, therefore, not surprising to find a decline in 1896, although the fall to 173 decrees is too great to be taken as the actual decrease in divorce. In Victoria, where a somewhat similar law prevails, there was not, immediately after the passing of the Act, the alarming increase in divorces experienced in New South Wales ; but while the number of decrees granted in the mother colony is now less than in 1893, 1894, and 1895, in Victoria the divorce rate is largely increasing.

In New South Wales, under the Matrimonial Causes Act of 1873, the chief grounds on which divorce was granted were adultery after marriage on the part of the wife, and adultery with cruelty on the part of the husband. A measure, however, was passed through both Houses of the Legislature in 1892, and came into force in August of that year, which

in the main assimilated the law to that of Victoria. Under this Act and an Amending Act passed in 1893 petitions for divorce can be granted for the following causes, in addition to those already mentioned:—*Husband v. Wife.*—Desertion for not less than three years; habitual drunkenness for a similar period; being imprisoned under sentence for three years or upwards; attempt to murder or inflict grievous bodily harm, or repeated assault on the husband within a year preceding the date of the filing of the petition. *Wife v. Husband.*—Adultery, provided that at the time of the institution of the suit the husband is domiciled in New South Wales; desertion for not less than three years; habitual drunkenness for a similar period; being imprisoned for three years or upwards, or having within five years undergone various sentences amounting in all to not less than three years; attempt to murder or assault with intent to inflict grievous bodily harm, or repeated assault within one year previously. Relief can only be sought on these grounds should the petitioner have been domiciled in the colony for three years or upwards at the time of instituting the suit, and not have resorted to the colony for the purpose of having the marriage dissolved. In Queensland, South Australia, Western Australia, Tasmania, and New Zealand, divorces are granted principally for adultery on the part of the wife, and adultery coupled with desertion for over two years on the part of the husband.

The following table shows the number of decrees of dissolution of marriage and judicial separation granted in each colony, in quinquennial periods since 1871, as far as it is possible to procure the information. Information for an earlier period will be found in previous issues. Divorce was legalised in New South Wales in 1873, and the figures of that colony for 1871–75 only cover a portion of the five years. The totals for all except the last three periods are exclusive of decrees granted in New Zealand:—

Colony.	1871–75.		1876–80.		1881–85.		1886–90.		1891–95.		1896.	
	Divorces.	Judicial Separation.	Divorces.	Judicial Separation.	Divorces.	Judicial Separation.	Divorces.	Judicial Separation.	Divorces.	Judicial Separation.	Divorces.	Judicial Separation.
New South Wales	21	...	87	...	112	6	210	12	1143	57	173	5
Victoria	33	6	41	2	74	8	124	9	441	10	106	2
Queensland	4	1	14	...	5	2	26	3	26	3	3	2
South Australia	22	3	35	2	31	10	23	2	30	2	6	1
Western Australia	...	...	1	1	5	...	8	...	9	...	1	...
Tasmania	9	...	9	...	9	...	15	2	21	2	3	...
New Zealand	*...	*...	*...	*...	*...	*...	110	5	101	14	36	2
Australasia	89	10	187	5	236	26	516	33	1771	88	328	12

* Information not available.

Taking the figures given in the foregoing table, and comparing them with the number of marriages celebrated during the same periods, the rates of divorce for the individual colonies, per 10,000 marriages, will be found below. It will be seen that in 1896 the rate for New South Wales was considerably less than that for the five years 1891–95, although, it may be said, it was still higher than in any country of the world except the United States and Switzerland. In Victoria and New Zealand, on the other hand, there was a large increase in the rate in 1896 :—

Colony.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896.
New South Wales	†23·5	33·6	31·3	54·3	300·6	209·5
Victoria	16·0	16·9	24·4	31·1	119·6	141·6
Queensland	8·0	18·7	6·0	19·0	21·4	17·7
South Australia	33·5	34·6	33·1	24·3	29·9	32·1
Western Australia	...	20·5	44·8	53·5	38·6	9·3
Tasmania	27·4	22·0	18·0	35·4	50·8	31·1
New Zealand	*...	*...	*...	63·5	56·9	78·5

* Information not available. † 1874 and 1875 only.

In the subjoined table will be found the actual number of divorces and judicial separations granted during each of the years 1890–96. It will be seen that, taking the colonies as a whole, divorce increased rapidly until 1894, but has diminished during the last two years, owing to the reduction in the number of decrees granted in New South Wales :—

Colony.	1890.		1891.		1892.		1893.		1894.		1895.		1896.	
	Divorces.	Judicial Separation.	Divorces.	Judicial Separation.	Divorces.	Judicial Separation.	Divorces.	Judicial Separation.	Divorces.	Judicial Separation.	Divorces.	Judicial Separation.	Divorces.	Judicial Separation.
New South Wales	55	4	66	7	102	11	304	9	369	18	302	12	173	5
Victoria	40	..	99	..	91	1	85	7	81	2	85	..	106	2
Queensland	8	2	5	1	6	..	5	2	6	..	4	..	3	2
South Australia	2	..	5	..	7	..	8	1	5	1	5	..	6	1
Western Australia	3	..	4	..	1	..	1	..	1	..	2	..	1	..
Tasmania	2	..	3	..	3	1	6	..	5	..	4	1	3	..
New Zealand	21	3	20	3	18	1	25	1	20	4	18	5	36	2
Australasia	131	9	202	11	228	14	434	20	487	25	420	18	328	12
Totals	140		213		242		454		512		438		340	
Number of marriages	27,525		27,663		26,047		24,742		24,798		25,669		28,010	
Divorces and separations per 10,000 marriages	50·9		77·0		81·8		183·5		206·5		170·6		121·4	

From the appended statement, which sets forth the latest divorce rates of the countries for which accurate statistics are obtainable, it will be seen that there is a larger proportion of marriages dissolved in Australasia than in any other part of the British Empire, but that the rate for these colonies as a whole is largely exceeded by a number of foreign

countries. Of countries where divorce laws are in force, no reliable statistics are available for Denmark, Hungary, Russia, and Spain. In Italy and Portugal divorce is not recognised by law :—

Country.	Divorces per 10,000 Marriages.	Country.	Divorces per 10,000 Marriages.
Canadian Dominion ...	4	Cape Colony	98
United Kingdom	11	Netherlands	103
Norway	16	Germany	165
Austria proper	43	France	180
Greece	50	Roumania	204
Belgium	81	Switzerland	432
Sweden	87	United States	612

Insanity.

In Australasia, at the end of the year 1896, there were 13,303 insane persons under official cognizance, giving a rate of 30·8 per 10,000 of the population, as compared with 31·4 in England and Wales, and 32·7 in Scotland, so that it will be seen that insanity is slightly greater in Great Britain than in these colonies. An inspection of the table given below, showing the number of insane persons in each colony, and the rate per 10,000 inhabitants, will disclose the fact that the rate of insanity varies greatly in the various provinces of Australasia. In Victoria it is very high, being no less than 35·8 per 10,000 ; while in New Zealand it is 32·4, and in Queensland, 31 per 10,000 of the population. Western Australia is assigned the very low rate of 13·4 ; but in reality this only marks the limit of the hospital accommodation in that colony ; for, according to the Superintending Medical Officer of the Lunatic Asylum at Fremantle, many applications for the admission of male patients were refused in 1896, owing to lack of accommodation :—

Colony.	Number of Insane.			Insane Persons per 10,000 of Population.
	Males.	Females.	Persons.	
New South Wales	2,353	1,488	3,841	29·6
Victoria	2,234	1,970	4,204	35·8
Queensland	938	524	1,462	31·0
South Australia	540	394	934	25·9
Western Australia	131	54	185	13·4
Tasmania	193	169	362	21·8
New Zealand	1,390	925	2,315	32·4
Australasia	7,779	5,524	13,303	30·8

There seems to be no reasonable doubt that insanity is increasing, both in Great Britain and in Australasia. In England and Wales the rate has steadily grown from 18·67 per 10,000 inhabitants in 1859 to 23·93 in 1869, 27·54 in 1879, 29·65 in 1889, and 31·38 in 1896; while in Scotland a similar increase has been experienced, the rate having been 19·8 in 1859, 25·2 in 1879, 29·5 in 1889, and 32·7 in 1895. The greater part of this increase is no doubt rightly attributed to an improvement in the administration of the Commissioners in Lunacy, by which a more accurate knowledge of the number of cases existent in the country has been gained; but the steady growth of the rate in recent years, when statistical information has been brought to a high pitch of perfection, plainly points to the fact that the advance of civilization, with the increasing strain to which the struggle for existence is subjecting body and mind, has one of its results in the growth of mental disease. In all the colonies of Australasia, with the sole exception of Tasmania, there is seen the same state of affairs as the insanity returns of Great Britain disclose, although the conditions of life press much more lightly on the individual here. No doubt the trade depression experienced in these colonies during the last few years has been the cause of the increase in insanity. The returns for New South Wales show that between 1877 and 1890 there was no growth in the rate, which fluctuated between 27·9 and 29·0 per 10,000 of the population, but that since 1891 there has been a steady and uninterrupted growth. The experience of the various colonies of the group is fairly presented in the following table, in which the two five-yearly periods 1887–91 and 1892–96 are compared with the year 1896. For Western Australia the returns for some of the earlier years are not available at the present time:—

Colony.	Rate of Insanity per 10,000 of Population.		
	1887–91.	1892–96.	1896.
New South Wales	27·4	28·6	29·6
Victoria	33·4	34·8	35·8
Queensland	26·4	30·0	31·0
South Australia	25·0	25·5	25·9
Western Australia	.....	.....	13·4
Tasmania	24·7	22·9	21·8
New Zealand	28·5	31·1	32·4
Australasia	29·0	30·5	30·8

Thus, the only colony where the rate is diminishing is Tasmania. In England and Wales it is found that the increase has taken place amongst what are termed the "pauper" class; that is, those whose relatives are not in a position to support them after they lose their reason. One

remarkable difference between the two countries in the matter of insanity is that in Great Britain the larger proportion of insanity is found amongst women; and in the Australasian colonies, amongst men. In England and Wales the rate of insanity for males is only 29·51 per 10,000 as compared with 33·15 per 10,000 females; but this difference is being slowly reduced. On the other hand, in all the Australasian colonies is the rate higher for men than for women. In New South Wales the rate for males is 33·8 per 10,000, as compared with 24·7 for females; in Queensland the rates are 35·4 for males and 25·2 for females; and in New Zealand, 36·9 for males and 27·4 for females. The smallest difference between the sexes is found in those colonies where the male population follow in greater proportion what may be termed the more settled pursuits. In Tasmania the excess of the male rate over that for females is only 0·2 per 10,000; and in Victoria, 3·8.

Dealing with the causes of insanity in England and Wales, taking those cases to which causes have been assigned, hereditary influence has been traced in 21·1 per cent. of the insane males; intemperance in drink as the cause of insanity in 20·9 per cent.; adverse circumstances, mental anxiety, worry, and overwork, in 13·6 per cent.; and domestic trouble, including loss of relatives and friends, in 4·3 per cent.; or, in all, 59·9 per cent. of the cases of insanity amongst males due to these causes. In New South Wales, which may be taken as typical of Australasia, the causes mentioned have only been responsible for 37·4 per cent. of the cases of insanity amongst men to which causes have been assigned, namely, hereditary influence ascertained, 7·1 per cent.; intemperance in drink, 17·9 per cent.; adverse circumstances, mental anxiety, worry, and overwork, 10·7 per cent.; and domestic trouble, 1·7 per cent. Amongst the females, hereditary influence has been ascertained in 25·6 per cent. of the cases in England and Wales, and only 10·9 per cent. in New South Wales; intemperance in drink, 8·1 per cent. in England and Wales, and 6·2 in New South Wales; adverse circumstances, mental anxiety, worry, and overwork, 10·4 per cent. in England and Wales, and 6 per cent. in New South Wales; domestic trouble, 9·2 per cent. in England and Wales, and 7·6 per cent. in New South Wales. These differences are what might be expected; and the small proportion of cases in the colony set down to hereditary influence is without doubt simply due to the difficulty of obtaining knowledge of the family history of a large proportion of the population of Australasia.

A fruitful cause of insanity amongst women are pregnancy, parturition and the puerperal state, lactation, uterine and ovarian disorders, puberty, and change of life. Taking these together, it is found that they form a proportion of 15·4 per cent. in England and Wales, and 18·5 per cent. in New South Wales. It would be premature to attempt to assign reasons for the difference between the two countries until the statistical inquiries are more developed; but the life led by many mothers in the solitudes of the bush has a great tendency to produce morbidity, and the explanation of the higher proportion alluded to

may be traceable to this cause. There is a danger in forcing statistical comparisons too far, which these figures illustrate; for, although the percentage of insane women whose disease can be traced to pregnancy and the natural processes of generation is higher in Australia than in England, yet the actual proportion of the whole female population is lower, being 4·57 compared with 5·16 per 1,000.

For the purpose of comparison with the figures given above for Australasia and Great Britain, the rates of insanity per 10,000 of population, mostly based on the latest census returns, are appended for some of the principal countries :—

Country.	Rate of Insanity per 10,000 of Population.	Country.	Rate of Insanity per 10,000 of Population.
Ireland	45·1	Canada.....	27·4
Norway	39·0	Germany	22·8
Sweden	34·1	Austria.....	21·7
United States	32·3	Hungary	16·1

SHIPPING.

THE earliest date for which there is reliable information in regard to the shipping of Australasia is the year 1822. Since that time the expansion of the trade of these colonies has been marvellous, and although population has increased at a high rate, yet the growth of shipping has been even more rapid. In the table given below the increase in the number and tonnage of vessels may be traced. It is necessary to point out that the figures include the intercolonial traffic, and are, therefore, of little value in a comparison between the shipping trade of Australasia and that of other countries, as the vessels plying between the various colonies represent merely coasting trade when Australasia is considered as a whole. This distinction is kept in view throughout this chapter, as well as in the succeeding one dealing with commerce :—

Year.	Entered and Cleared.		Year.	Entered and Cleared.	
	Vessels.	Tonnage.		Vessels.	Tonnage.
1822	268	147,869	1871	13,274	4,229,904
1841	2,576	552,347	1881	15,935	8,943,545
1851	5,340	1,088,108	1891	18,468	17,479,535
1861	10,316	2,828,484	1896	18,195	19,613,999

In the year 1822 all the settlements on the mainland were comprised in the designation of New South Wales, and as late as 1859 Queensland formed part of the mother colony. Thus an exact distribution of shipping amongst the seven colonies as they are now known can only be made for the period subsequent to the year last named. Such a division of the total tonnage entered and cleared is made in the following

table for the four census years commencing with 1861, as well as for the year 1896 :—

Colony.	Total Tonnage Entered and Cleared.				
	1861.	1871.	1881.	1891.	1896.
New South Wales	745,696	1,500,479	2,786,500	5,694,236	6,189,760
Victoria	1,090,002	1,355,025	2,412,534	4,715,109	4,566,230
Queensland	44,645	93,236	882,491	997,118	1,094,048
South Australia	199,331	387,026	1,359,591	2,738,589	3,494,966
Western Australia	115,256	137,717	285,046	1,045,555	2,136,378
Tasmania	230,218	216,160	383,762	1,044,606	890,861
New Zealand	403,336	540,261	833,621	1,244,322	1,241,756
Australasia	2,828,484	4,229,904	8,943,545	17,479,535	19,613,999

The tonnage of 1891 exceeded that of any preceding year. This result was not altogether due to the actual requirements of the trade of that year, as, in consequence of the maritime strike, a large quantity of goods remained unshipped at the close of 1890, and helped to swell the returns for the succeeding twelve months. It was not until 1895 that the tonnage of 1891 was again reached; but in 1896 a still greater improvement was visible, the total shipping amounting to 19,613,999 tons, or nearly 8 per cent. more than the tonnage of the previous year. Of the individual colonies, New South Wales, Queensland, South Australia, and Western Australia had their largest amount of shipping in 1896 ; Tasmania and New Zealand, in 1892 ; and Victoria, in 1891.

Below will be found the proportion of the tonnage of each colony to the total shipping of Australasia in the five years quoted above :—

Colony.	Percentage of total of Australasia.				
	1861.	1871.	1881.	1891.	1896.
New South Wales	26·4	35·5	31·1	32·6	31·6
Victoria	38·5	32·0	27·0	27·0	23·3
Queensland	1·8	2·2	9·9	5·7	5·6
South Australia	7·0	9·1	15·2	15·6	17·8
Western Australia	4·0	3·3	3·2	6·0	10·9
Tasmania	8·1	5·1	4·3	6·0	4·5
New Zealand	14·2	12·8	9·3	7·1	6·3
Australasia	100·0	100·0	100·0	100·0	100·0

It will be seen that in 1861 the shipping of New South Wales was largely exceeded by that of Victoria, but that by 1871 the mother colony had assumed the leading position. Dealing with the period

covered by the last fifteen years, the figures show that the positions held by most of the colonies in 1881 are much the same relatively as those occupied by them to-day, the position of New South Wales having been rather strengthened than otherwise. The notable exceptions are Western Australia and Queensland, the former colony having apparently so far advanced from a commercial point of view that it now transacts the fourth largest proportion of the shipping trade of Australasia instead of the smallest, while the latter has receded from fourth to sixth position. These changes, however, have not been altogether due to an expansion of trade in different degrees, but to causes which do not quite lie upon the surface. A clearer view of the progress made by each colony, according to the official returns, during the period from 1881 to 1896, may be obtained from the following figures :—

Colony.	Increase of Shipping per cent.
New South Wales	122
Victoria	89
Queensland	24
South Australia	157
Western Australia	649
Tasmania	132
New Zealand	49
Australasia	119

It is possible that the increase in the tonnage of Queensland was greater than the 24 per cent. shown above. Prior to the year 1883 the shipping returns of that colony recorded the arrival and departure of vessels at every port of call instead of at the terminal port only—a practice which still prevails in the publication of the statistics of individual ports. The figures showing the shipping entered and cleared in 1871 and 1881 have, therefore, been reduced in order to place them on the same basis as those of the other colonies, and the estimate in the latter year may be somewhat high. At the same time, the great advance made by the eastern colonies during the past fifteen years has been largely due to the mail steamers, which do not go round to Brisbane. In the case of Western Australia the figures err on the side of being too high; for the

abnormal development shown is not altogether due to growth of trade, but in a large measure to the fact that Albany has been made a port of call by most of the mail-steamers on their voyage between Europe and the eastern colonies. During the last few years, however, the development of the gold-fields in Western Australia has had the effect of greatly increasing the legitimate tonnage of that colony, the total shipping in 1896 being fully 106 per cent. higher than in 1891.

Intercolonial Shipping.

Of the total shipping of Australasia, which has been dealt with in the preceding section, a proportion of nearly 64 per cent. is represented by trade between the various colonies. In the following table will be found the number and tonnage of vessels entered at the ports of each colony from the other provinces. As a rule, the expansion of the trade of a colony with its neighbours has kept pace with the growth of its commerce with outside countries. To this general statement New Zealand forms an exception, on account of the development of its resources to such a point that it has been enabled to enter into direct commercial relations with the United Kingdom, instead of trading, as formerly, by way of the ports of New South Wales or Victoria:—

Colony.	Entered from other Colonies.					
	1881.		1891.		1896.	
	Vessels.	Tonnage.	Vessels.	Tonnage.	Vessels.	Tonnage.
New South Wales	1,730	939,158	2,375	1,847,435	2,468	1,852,535
Victoria	1,733	780,633	2,067	1,542,369	1,545	1,580,377
Queensland	663	268,593	405	277,055	454	350,448
South Australia	837	412,493	778	690,488	1,004	1,084,646
Western Australia	95	74,020	155	242,004	525	685,154
Tasmania	654	175,439	724	409,147	617	337,767
New Zealand	457	227,284	475	351,227	363	307,452
Australasia	6,169	2,877,620	6,979	5,359,725	6,976	6,198,379

It will be seen that New South Wales heads the list with nearly one-third of the shipping entered from other colonies, a position which in a large measure is doubtless due to the fact that many vessels which discharge in other colonies proceed to New South Wales to load for foreign ports. Victoria stands second to New South Wales in regard to the quantity of tonnage entered, but it ranks first in the amount of tonnage cleared, as may be seen from the following figures :—

Colony.	Cleared for other Colonies.					
	1881.		1891.		1896.	
	Vessels.	Tonnage.	Vessels.	Tonnage.	Vessels.	Tonnage.
New South Wales	1,507	766,896	2,146	1,574,841	2,286	1,636,496
Victoria	1,889	894,629	2,265	1,842,183	1,614	1,679,029
Queensland	679	331,459	423	326,808	465	364,377
South Australia	871	467,867	891	872,654	1,093	1,236,985
Western Australia	102	71,826	159	269,592	500	689,906
Tasmania	661	180,644	768	489,350	652	406,472
New Zealand	422	199,517	447	287,332	349	287,917
Australasia	6,131	2,912,838	7,099	5,662,760	6,959	6,301,182

As compared with New South Wales, the position occupied by Victoria in the above table is peculiar, and partly arises from the necessity for many vessels which enter its ports with cargo to clear in ballast and seek outward freights in New South Wales, chiefly at the port of Newcastle. Many of these vessels load coal for foreign ports; and while they are cleared at Melbourne as engaged in the intercolonial trade, on their outward voyage from Newcastle they are, of course, reckoned amongst the external shipping. Another point which should be remembered when considering the shipping of Victoria, and, indeed, of South Australia and Western Australia also, is the fact that at the ports of that colony the great ocean-liners are reckoned twice over in every trip from Europe, namely, as entering and clearing on their way to Sydney, and again on their return from the terminal port; and this causes an undue inflation of the intercolonial returns.

The combined tonnage entered and cleared during 1881, 1891, and 1896, with the percentage for each colony, will be found below :—

Colony.	Entered and Cleared.					
	Total Tonnage.			Percentage of Total.		
	1881.	1891.	1896.	1881.	1891.	1896.
New South Wales	1,706,054	3,422,276	3,489,031	29·5	31·0	27·9
Victoria	1,675,262	3,384,552	3,259,406	28·9	30·7	26·1
Queensland	600,052	603,863	714,825	10·4	5·5	5·7
South Australia	880,360	1,563,142	2,321,631	15·2	14·2	18·6
Western Australia	145,846	511,596	1,375,060	2·5	4·6	11·0
Tasmania	356,083	898,497	744,239	6·2	8·2	5·9
New Zealand	426,801	638,559	595,369	7·3	5·8	4·8
Australasia	5,790,458	11,022,485	12,499,561	100·0	100·0	100·0

External Shipping.

It has been explained that in any comparison between the shipping of Australasia and that of other countries the intercolonial trade would have to be excluded; but even then the tonnage would be too high, because of the inclusion of mail-steamers and other vessels on the same voyage in the returns of several of the colonies. However, it is scarcely possible to amend the returns so as to secure the rejection of the tonnage which is reckoned twice over; and in considering the following statement, showing the shipping trade of these colonies with countries beyond Australasia, this point should be borne in mind :—

Division.	1871.		1881.		1891.		1896.	
	Vessels	Tonnage.	Vessels	Tonnage.	Vessels	Tonnage.	Vessels	Tonnage.
United Kingdom—								
Entered	305	294,321	768	999,403	967	1,863,664	782	1,791,689
Cleared	288	266,432	491	651,825	753	1,484,745	703	1,615,801
Total	593	560,753	1,259	1,651,228	1,720	3,348,409	1,485	3,407,490
British Possessions—								
Entered	320	133,127	623	393,234	511	536,879	646	734,853
Cleared	337	163,350	596	374,753	463	469,453	503	506,695
Total	657	296,477	1,219	767,987	974	1,006,332	1,149	1,241,548
Foreign Countries—								
Entered	449	192,377	519	302,607	754	938,662	734	1,114,264
Cleared	645	229,809	638	431,265	942	1,163,647	892	1,351,136
Total	1,094	422,186	1,157	733,872	1,696	2,102,309	1,626	2,465,400
All External Trade—								
Entered	1,074	619,825	1,910	1,695,244	2,232	3,339,205	2,162	3,640,806
Cleared	1,270	659,591	1,725	1,457,843	2,158	3,117,845	2,098	3,473,632
Total	2,344	1,279,416	3,635	3,153,087	4,390	6,457,050	4,260	7,114,438

The external shipping of Australasia during 1896 was the highest in the history of the country, being fully 10 per cent. more than the tonnage entered and cleared in 1891, when trade was inflated by the shipment of goods left over from the previous year on account of the maritime strike. A distribution of the traffic amongst the leading divisions of the British Empire and the principal foreign countries with whom the colonies have commercial relations will be found below :—

Country.	Entered from and cleared for Countries beyond Australasia.					
	1881.		1891.		1896.	
	Vessels.	Tonnage.	Vessels.	Tonnage.	Vessels.	Tonnage.
British Empire—						
United Kingdom	1,259	1,651,228	1,720	3,348,409	1,485	3,407,490
India and Ceylon.....	167	272,199	142	286,319	117	235,080
Hong Kong	244	257,011	227	324,820	255	365,939
Cape Colony	133	54,949	72	66,211	140	191,461
Fiji	153	43,255	153	127,189	126	91,447
Other British Possessions	522	140,573	380	201,793	511	357,621
Total, British	2,478	2,419,215	2,694	4,354,741	2,634	4,649,038
Foreign Countries—						
France and New Caledonia	224	113,215	275	417,064	324	608,392
Germany	27	15,786	208	393,001	187	484,611
Netherlands and Java...	67	35,719	51	74,843	71	99,195
Belgium	2	1,552	27	41,907	31	54,191
United States	294	301,246	484	597,210	371	555,411
China	81	53,996	34	33,135	7	6,714
Other Foreign Countries	462	212,358	617	545,149	635	656,886
Total, Foreign.....	1,157	733,872	1,696	2,102,309	1,626	2,465,400
All External Tonnage	3,635	3,153,087	4,390	6,457,050	4,260	7,114,438

Of the total amount of external shipping, New South Wales takes no less a proportion than 38·0 per cent., or more than double the quantity of Victoria, which ranks next in importance to the mother colony. In the following table the division of tonnage between the seven colonies is shown; but the figures in the chapter on commerce give a better idea of the relative importance of the provinces in external trade, as the tonnage of the mail-steamers entered and cleared at Albany and Port Adelaide is out of all proportion to the goods landed and shipped there:—

Colony.	Entered and Cleared.						Percentage of each Colony to Total.		
	1881.		1891.		1896.				
	Vessels	Tonnage.	Vessels	Tonnage.	Vessels	Tonnage.	1881.	1891.	1896.
New South Wales	1,120	1,080,446	1,600	2,271,960	1,678	2,700,729	34·3	35·2	38·0
Victoria	626	737,272	759	1,330,557	623	1,306,824	23·4	20·6	18·4
Queensland	461	282,439	342	393,255	375	379,223	8·9	6·1	5·3
South Australia	541	479,231	760	1,175,447	619	1,173,335	15·2	18·2	16·5
Western Australia	171	139,200	284	533,959	426	761,318	4·4	8·2	10·7
Tasmania	68	27,679	86	146,109	70	146,622	0·9	2·3	2·0
New Zealand	648	406,820	559	605,763	469	646,387	12·9	9·4	9·1
Australasia	3,635	3,153,087	4,390	6,457,050	4,260	7,114,438	100·0	100·0	100·0

A comparison between the shipping of the principal countries of the world and the external tonnage of Australasia is appended:—

Country.	Tonnage Entered and Cleared.		Country.	Tonnage Entered and Cleared.	
	Total.	Average per head.		Total.	Average per head.
United Kingdom.....	85,462,422	2·2	France	30,026,932	0·8
Russia in Europe ...	18,862,501	0·2	Spain	23,023,337	1·5
Norway	5,850,785	2·9	Italy	17,005,287	0·5
Sweden.....	14,119,804	2·9	United States	35,271,758	0·6
Denmark	9,318,858	4·4	Argentine Republic	15,208,853	3·8
Germany	24,086,632	0·5	Canada	11,458,824	2·3
Holland	15,611,910	3·5	Cape Colony	4,867,719	2·8
Belgium	14,971,182	2·5	Australasia	7,114,438	1·7

On the basis of population, therefore, the colonies of Australasia exceed the great countries of the United States, France, Germany, Italy, Russia, and Spain in the amount of shipping trade.

Tonnage in Ballast.

A peculiar feature of the shipping trade of these colonies is the small though varying proportion of tonnage in ballast arriving from and departing for places beyond Australasia. Thus in the year 1881 this description of tonnage amounted to 4·3 per cent., and in 1891 to 3·5 per cent., of the total external shipping of the colonies; while in 1896, at 7·6 per cent., the proportion was comparatively high. The small increase during recent years is chiefly due to the larger number of vessels which come to New South Wales in quest of freights, the proportion of shipping in ballast for that colony being somewhat less than that for the United Kingdom. The total external tonnage entered and cleared in ballast during the years 1881, 1891, and 1896 was as follows:—

Colony.	Tonnage Entered and Cleared in Ballast.			Percentage of Tonnage in Ballast to Total External Tonnage of each Colony.		
	1881.	1891.	1896.	1881.	1891.	1896.
New South Wales	22,376	74,976	339,531	2·1	3·3	12·6
Victoria	12,841	27,417	57,647	1·7	2·1	4·4
Queensland	25,378	25,868	14,591	9·0	6·6	3·8
South Australia	28,590	40,907	64,005	6·0	3·5	5·5
Western Australia	10,399	14,030	39,294	7·5	2·6	5·2
Tasmania	4,553	11,816	5,814	16·4	8·1	4·0
New Zealand	30,622	30,650	21,838	7·5	5·1	3·4
Australasia	134,759	225,664	542,720	4·3	3·5	7·6

The reason why so small a proportion of Australasian shipping clears in ballast is principally to be found in the great and varied resources of the country; for when the staple produce—wool—is not available, cargoes of wheat, coal, and other commodities may generally be obtained. Besides, owing to the great distance of the ports of these colonies from the commercial centres of the old world, vessels are not usually sent out without at least some prospect of a return cargo being secured. As a rule, it does not pay to send vessels to Australasia seeking freights, as is commonly done with regard to European and American ports. It is strong testimony, therefore, of the value of the trade of New South Wales to shipowners to find entered at the ports of that colony direct from outside countries the comparatively large quantity of 302,994 tons of shipping in ballast, 76,192 tons of which came from South American ports, and 126,879 from the Cape Colony.

The proportion of tonnage in ballast to the total shipping of some of the principal countries of the world is subjoined :—

Country.	Percentage of Shipping in ballast.	Country.	Percentage of Shipping in ballast.
United Kingdom	16·7	Belgium	27·8
Russia in Europe	35·7	France.....	18·9
Norway	27·1	Spain	26·7
Sweden	44·1	Italy	20·3
Germany.....	20·8	United States	14·9
Holland	24·5	Australasia.....	7·6

Nationality of Vessels.

The shipping trade of Australasia is almost entirely in British hands, as will be seen from the subjoined table, which deals with the total tonnage of the colonies, both intercolonial and external. Although direct communication with continental Europe has been established within recent years, and several lines of magnificent steamers have entered into the trade between Australia and foreign ports, yet the proportion of shipping belonging to Great Britain and her dependencies has only fallen from 92·9 to 87·9 per cent. during the period extending from 1881 to 1896 :—

Nationality.	Total Shipping Entered and Cleared.						Percentage of each Nationality.		
	1881.		1891.		1896.				
	Vessels.	Tonnage.	Vessels.	Tonnage.	Vessels.	Tonnage.	1881.	1891.	1896.
British.....	15,127	8,313,535	16,834	15,208,612	16,696	17,233,751	92·9	87·0	87·9
French	91	47,713	251	593,386	300	663,336	0·5	3·4	3·4
German	199	130,070	542	856,528	409	931,362	1·5	4·9	4·8
Scandinavian.....	133	66,566	336	304,977	424	362,055	0·7	1·7	1·8
American	308	328,540	382	383,933	227	256,979	3·7	2·2	1·3
Other nationalities.	77	57,121	123	132,099	139	166,516	0·7	0·8	0·8
Total	15,935	8,943,545	18,468	17,479,535	18,195	19,613,999	100·0	100·0	100·0

The returns published by the various colonies are not in such a form as to admit of the purely local tonnage being separated from the other shipping of the Empire, and vessels owned in Australasia are classed in the above table as "British." The number and tonnage of the steam and sailing vessels registered in each of the colonies are given on page 140. Few of the large vessels employed in the intercolonial trade have been built in Australasia, and it is possible that the registrations do not represent the whole of the tonnage engaged in local waters.

Steam and Sailing Vessels.

The tendency to substitute steamers for sailing vessels, which is general throughout the world, is very marked in the Australasian trade. Unfortunately the records of Queensland and of the Northern Territory do not admit of the separation of the two classes of vessels, and this was the case also with regard to the colonies of South Australia and New Zealand until late years. It is not possible, therefore, to show the increase of steam tonnage for the whole of Australasia, but appended will be found the figures for the various colonies so far as they can be given :—

Colony.	Total Steam Tonnage entered and cleared.			Percentage of Steam to Total Tonnage.		
	1881.	1891.	1896.	1881.	1891.	1896.
New South Wales...	1,758,304	4,299,791	4,769,750	63·1	75·5	77·1
Victoria	1,787,861	4,091,057	4,220,935	74·1	86·8	92·4
South Australia* ...	†.....	2,007,775	2,878,933	†...	73·3	86·8
Western Australia..	210,664	978,568	1,987,231	73·9	93·6	93·0
Tasmania	265,833	960,224	835,528	69·3	91·9	93·8
New Zealand.....	†.....	822,086	960,451	†...	66·1	77·3

* Excluding Northern Territory. † Not obtainable.

The substitution of steam for sailing vessels in the shipping trade of some of the principal countries of the world may be gathered from the following table. The percentage for Australasia is calculated on the basis of the shipping of the colonies exclusive of that of Queensland and of the Northern Territory of South Australia :—

Country.	Percentage of Steam to Total Tonnage.	
	1881.	1896.
United Kingdom	67·7	89·0
Norway	31·1	60·7
Sweden.....	46·8	78·5*
Denmark	61·9	83·9
Germany	70·8	88·8
Holland	74·4	95·5
Belgium	81·3	95·9
France	69·5	92·5
Italy	72·8	92·0
United States	55·5	79·5
Argentine Republic	70·4	90·1
Australasia	68·6	85·3

* Percentage for year 1895.

A comprehensive view of the changes which have taken place during the last thirty-five years in the class of vessel engaged in the intercolonial and the external shipping trade of Australasia is afforded by the following figures :—

Year.	Vessels.	Tonnage.	Crews.	Average Tonnage per vessel.	Average Tonnage per hand.
		INTERCOLONIAL SHIPPING.			
1861	8,355	1,751,628	122,280	210	14
1871	10,930	2,950,488	169,020	270	17
1881	12,300	5,790,458	324,951	471	18
1891	14,078	11,022,485	443,424	783	25
1896	13,935	12,499,561	464,392	897	27
		EXTERNAL SHIPPING.			
1861	1,961	1,076,856	52,440	549	21
1871	2,344	1,279,416	52,330	546	24
1881	3,635	3,153,087	129,826	867	24
1891	4,390	6,457,050	231,878	1,471	28
1896	4,260	7,114,438	247,326	1,670	29
		ALL AUSTRALASIAN SHIPPING.			
1861	10,316	2,828,484	174,720	274	16
1871	13,274	4,229,904	221,350	319	19
1881	15,935	8,943,545	454,777	561	20
1891	18,468	17,479,535	675,302	946	26
1896	18,195	19,613,999	711,718	1,078	28

In view of the many magnificent steamers now carrying the mails between Europe and Australia, it is somewhat remarkable to find that the vessels engaged in the intercolonial trade have more than kept pace in increase of tonnage with those trading between these colonies and other countries. Of course, the increase in the average tonnage of intercolonial vessels is represented as greater than it actually has been, owing to the mail steamers on their way to Sydney being cleared at Albany, Adelaide, and Melbourne for the colonies further east; but when allowance has been made on this score, the improvement in the class of vessel trading in local waters will be found most noteworthy. It is well known, however, that the steamers running on the Australian coast favourably compare with those engaged in the coasting trade of the United Kingdom.

Relative Importance of Ports.

The relative importance of the various ports of Australasia may be ascertained by an inspection of the table given hereunder. Melbourne takes first place in the amount of tonnage; but the figures are inflated by the counting of the great ocean steamers as twice entering and twice clearing at Port Phillip. This remark applies equally to Port Adelaide and Albany. If allowance be made on this score, it will be found that Sydney has a larger quantity of shipping than any other Australasian port, and that it is followed by Melbourne, Newcastle, and Port Adelaide. In reference to the figures given for Queensland ports, it is necessary to point out that vessels are entered and cleared at all ports which they visit, and not at the first and last port of call only, and the quantity of tonnage shown is therefore in most cases greater than it ought to be represented:—

Port.	Tonnage entered and cleared.		
	1881.	1891.	1896.
New South Wales—			
Sydney	1,610,692	3,291,188	3,911,051
Newcastle	1,127,238	1,844,842	1,867,889
Victoria—			
Melbourne	2,144,949	4,362,138	4,357,400
Geelong	93,347	190,932	133,665
Queensland—			
Brisbane	406,032	855,993	894,178
Townsville	205,886	544,470	667,246
Rockhampton	207,706	471,837	440,792
Cooktown	217,144	469,577	365,914
South Australia—			
Port Adelaide	1,078,920	1,990,938	2,874,646
Port Pirie	33,325	321,781	276,748
Port Darwin	90,100	170,642	177,079
Western Australia—			
Albany	219,902	931,502	1,548,963
Fremantle	42,618	63,068	409,373
Tasmania—			
Hobart	204,007	646,683	603,197
Launceston	138,657	293,537	198,564
New Zealand—			
Auckland	238,886	345,183	432,285
Wellington	119,243	293,451	347,989
Bluff Harbour	91,592	196,540	151,035
Lyttelton	167,151	161,387	138,330
Dunedin	114,637	97,409	77,647

A better idea of the relative importance of the principal ports of the colonies is obtainable from the trade figures, which are given below for the year 1896 :—

Port.	Total Trade.	Average per ton of Shipping.	Port.	Total Trade.	Average per ton of Shipping.
New South Wales—	£	£	Western Australia—	£	£
Sydney	33,460,589	8·6	Fremantle	5,554,391	13·6
Newcastle	2,108,567	1·1	Albany	748,021	0·4
Victoria—			Tasmania—		
Melbourne	24,497,050	5·6	Hobart	1,065,133	1·8
Queensland—			Launceston	1,198,376	6·0
Brisbane	5,220,926	5·8	New Zealand—		
South Australia—			Wellington	3,079,112	8·8
Port Adelaide	9,160,432	3·2	Auckland	3,236,605	7·5

The comparative importance of the ports of Australasia may be seen by viewing them in connection with the shipping and trade of the chief ports of the United Kingdom, the 1896 figures for which are appended. It will be seen that in aggregate tonnage Melbourne is exceeded only by London, Liverpool, Cardiff, and Newcastle. Hull comes next on the list, having a slight lead over Sydney, which in turn exceeds Glasgow and all other British ports. In value of trade Sydney is exceeded only by London, Liverpool, and Hull. If Australasia be regarded as one country, however, the comparison is somewhat misleading, as the inter-colonial trade is included in the returns :—

Port.	Total Shipping.	Total Trade.	Port.	Total Shipping.	Total Trade.
England—	tons.	£	Ireland—	tons.	£
London	15,582,195	230,080,432	Belfast	526,047	4,214,292
Liverpool	10,883,024	196,811,209	Dublin	352,167	2,367,788
Cardiff	10,905,144	9,178,328			
Newcastle	4,604,104	10,430,405	Australasia—		
Hull	4,011,909	46,904,090	Sydney	3,911,051	33,460,589
Newport	2,385,675	2,351,485	Melbourne	4,357,400	24,497,050
Southampton	2,998,254	22,914,493	Adelaide	2,874,646	9,160,432
Scotland—			Brisbane	894,178	5,220,926
Glasgow	3,191,707	25,803,102	Fremantle	409,373	5,554,391
Leith	1,792,682	14,757,201	Hobart	603,179	1,065,133
Grangemouth	1,395,347	4,146,773	Auckland	432,285	3,236,605
Kirkcaldy	1,302,724	831,458			

The yearly movement of tonnage at Melbourne and Sydney far exceeds that of the ports of any other British possession, Hong Kong and Singapore excepted. Two other exceptions might be mentioned—Gibraltar and Malta; but as these are chiefly ports of call, and the trade is very limited compared with the tonnage, they can scarcely be placed in the same category.

Registration of Vessels.

The number and tonnage of steam and sailing vessels on the registers of each of the seven colonies at the end of 1896 are given below :—

Colony.	Steam.		Sailing.		Total.	
	Vessels.	Tonnage.	Vessels.	Tonnage.	Vessels.	Tonnage.
New South Wales	493	61,175	472	51,493	965	112,668
Victoria	151	54,192	259	41,568	410	95,760
Queensland	88	12,141	139	10,829	227	22,970
South Australia	103	29,073	215	22,507	318	51,580
Western Australia	12	3,563	132	4,550	144	8,113
Tasmania	44	7,285	159	9,250	203	16,535
New Zealand	183	67,324	309	38,229	492	105,553
Australasia	1,074	234,753	1,685	178,426	2,759	413,179

Shipping in 1897.

In 1897 the shipping of Australasia was the greatest in the history of the country. When this chapter was compiled detailed figures were not available for any of the colonies other than New South Wales, but the following table shows the tonnage entered and cleared at each province during the year :—

Colony.	Tonnage entered.	Tonnage cleared.	Total Tonnage.
New South Wales	3,331,877	3,412,554	6,744,431
Victoria	2,437,190	2,428,182	4,865,372
Queensland	569,610	559,290	1,128,900
South Australia	1,868,274	1,879,411	3,747,685
Western Australia	1,196,760	1,181,072	2,377,832
Tasmania	542,049	542,119	1,084,168
New Zealand	686,899	675,333	1,362,232
Australasia	10,632,659	10,677,961	21,310,620

COMMERCE.

IT is reasonable to expect that the trade of these colonies would increase as quickly as the population; but as a matter of fact its growth for many years was much more rapid, and at the present time the total commerce of Australasia per head of population is exceeded by that of no country except Belgium, half of whose trade consists of goods in course of transit to and from the north-western and central parts of the continent of Europe. Below will be found a statement of the trade of Australasia for various periods since the year 1825, prior to which date no information is available :—

Year.	Trade of Australasia.	
	Total Value.	Value per head.
	£	£ s. d.
1825	511,998	10 13 11
1841	5,573,000	22 4 0
1851	8,957,610	18 10 7
1861	52,228,207	41 19 10
1871	69,474,084	35 18 4
1881	101,710,967	36 12 7
1891	144,766,285	37 13 7
1892	122,761,263	31 2 10
1893	117,172,258	29 2 0
1894	109,691,901	26 13 8
1895	112,810,793	26 17 8
1896	129,139,621	30 3 4

It will be seen that the average value of trade per inhabitant increased by £1 15s. 3d. during the twenty years extending from 1871 to 1891, of which the period from 1881 to 1891 accounted for no less than £1 1s. This, however, does not show the full extent of the growth in trade, for the prices of produce—especially of wool, which has been the staple product of these colonies since very early years—have fallen heavily. To this cause must the great decline in the value of the trade since 1891, which has placed the average amount per head of population from 1892 to 1896 below that of any other period since the gold discovery, be partly attributed, and partly to the wave of depression which swept over Australasia, and from the effects of which the country has not yet recovered.

The following series of tables shows the distribution of the total trade of Australasia between the seven colonies for the years 1881, 1891, and 1896, with the average value per head of population. The first table represents the imports :—

Colony.	Total Value of Imports.			Value per Inhabitant.		
	1881.	1891.	1896.	1881.	1891.	1896.
	£	£	£	£ s. d.	£ s. d.	£ s. d.
New South Wales	17,587,012	25,383,397	20,561,510	23 2 7	22 3 11	15 19 4
Victoria	16,718,521	21,711,608	14,554,837	19 4 3	18 19 1	12 7 0
Queensland	4,063,625	5,079,004	5,433,271	18 5 8	12 12 11	11 13 0
South Australia	5,320,549	10,051,123	7,221,342	19 4 3	31 2 4	20 2 6
Western Australia	404,831	1,280,093	6,493,557	13 14 3	25 2 5	54 6 0
Tasmania	1,431,144	2,051,964	1,192,410	12 5 0	13 15 6	7 5 11
New Zealand	7,457,045	6,503,849	7,137,320	15 2 7	10 6 6	10 2 1
Australasia	52,982,727	72,061,038	62,594,247	19 1 7	18 15 1	14 12 5

The values of the total exports of the colonies for the same years were as given below :—

Colony.	Total Value of Exports.			Value per Inhabitant.		
	1881.	1891.	1896.	1881.	1891.	1896.
	£	£	£	£ s. d.	£ s. d.	£ s. d.
New South Wales	16,307,805	25,944,020	23,010,349	21 9 0	22 13 9	17 17 5
Victoria	16,252,103	16,006,743	14,198,518	18 13 6	13 19 6	12 1 0
Queensland	3,540,366	8,305,387	9,163,726	15 18 6	20 13 6	19 13 0
South Australia	4,508,754	10,642,416	7,704,874	16 5 7	32 19 0	21 9 6
Western Australia	502,770	799,466	1,650,226	17 0 8	15 13 9	13 16 0
Tasmania	1,555,576	1,440,818	1,496,576	13 6 3	9 13 5	9 3 1
New Zealand	6,060,866	9,566,397	9,321,105	12 5 11	15 3 10	13 3 11
Australasia	48,728,240	72,705,247	66,545,374	17 11 0	18 18 6	15 10 11

The total trade of each province was as follows :—

Colony.	Value of Total Trade.			Value per Inhabitant.		
	1881.	1891.	1896.	1881.	1891.	1896.
	£	£	£	£ s. d.	£ s. d.	£ s. d.
New South Wales	33,894,817	51,327,417	43,571,859	44 11 7	44 17 8	33 16 9
Victoria	32,970,624	37,718,351	28,753,355	37 17 9	32 18 7	24 8 0
Queensland	7,603,991	13,384,391	14,596,997	34 4 2	33 6 5	31 6 0
South Australia	9,829,303	20,693,539	14,926,216	35 9 10	64 1 4	41 12 0
Western Australia	907,601	2,079,559	8,143,783	30 14 11	40 16 2	68 2 0
Tasmania	2,986,720	3,492,782	2,688,986	25 11 3	23 8 11	16 9 0
New Zealand	13,517,911	16,070,246	16,458,425	27 8 6	25 10 4	23 6 0
Australasia	101,710,967	144,766,285	129,139,621	36 12 7	37 13 7	30 3 4

The point most notable in this series of tables is the very marked impetus which the trade of South Australia received during the period 1881–91—a trade of £64 1s. 4d. per inhabitant, the value transacted by that colony during 1891, being almost without parallel in any important country. This huge trade was, however, not drawn altogether from its own territory, for in 1891 more than £5,731,000, or about £17 15s. per inhabitant, and in 1896, £2,900,000, or £8 1s. 8d. per inhabitant, was due to the Barrier District of New South Wales, of which South Australia is the natural outlet; and it must also be remembered that considerable quantities of goods on their way to Broken Hill are entered as imports in South Australia when they arrive in that colony, and as exports to New South Wales when they cross the border. Of the total shrinkage of £22 9s. 4d. per head from 1891 to 1896, £9 13s. 4d. must be attributed to the falling-off in the Barrier trade.

The trade of New South Wales in 1891 stood at £51,327,417, which was the highest amount ever recorded; but in 1896 it had fallen to £43,571,859, an amount exceeded only during the years 1889, 1890, and 1891; while the value per inhabitant in 1896, although higher than in the two preceding years, was lower than had been recorded for many years prior to 1894. All the colonies advanced their total trade from 1881 to 1891, and all, except Victoria and Tasmania, their exports. In 1896 only New South Wales, Queensland, South Australia, and Western Australia showed larger imports than in 1881; while both exports and total trade had increased in every colony except Victoria and Tasmania. As compared with 1891, Queensland, Western Australia, and New Zealand are the only colonies that show an increase in imports; Queensland, Western Australia, and Tasmania, in exports; and the two first-named colonies and New Zealand in total trade.

Intercolonial Trade.

The trade shown in the above series of tables represents, not only the business transacted with countries outside Australasia, but the trade maintained by the colonies with one another. This intercolonial trade, which forms a considerable proportion of the total which has just been dealt with, increased in a slightly higher ratio than the population up to 1891, but since the year named it has decreased in a nearly equal ratio with the trade with outside countries. The following figures represent the total value of this important branch of the general trade, as well as the value per inhabitant. It is obvious that the total intercolonial trade which is shown by the table represents in reality twice the actual value of goods passing from one colony to another, the same merchandise figuring in one place as exports, and in another as imports. The value of goods passing through a colony on their way to foreign countries, as well as of

goods imported from abroad and re-exported, is, of course, also included in the figures. The actual movement is therefore less than half of the values given below :—

Year.	Total.	Value per Inhabitant.
	£	£ s. d.
1861	17,166,925	13 16 0
1871	29,745,068	15 7 6
1881	37,156,289	13 8 4
1891	60,114,797	15 12 11
1896	54,490,030	12 14 7

The figures given in the following table represent the total inter-colonial trade of each colony in 1881, 1891, and 1896, and although they are affected by the circumstances just mentioned, they afford interesting evidence of the way in which the prosperity of one province is bound up with that of the others :—

Colony.	1881.	1891.	1896.	1881.	1891.	1896.
	£	£	£	per cent	per cent	per cent
New South Wales..	13,211,372	22,730,348	17,934,686	35·6	37·8	32·9
Victoria	10,686,172	13,575,205	11,570,797	28·8	22·6	21·2
Queensland	4,810,286	6,822,366	7,841,073	12·9	11·3	14·4
South Australia ...	3,089,466	11,034,215	7,586,405	8·3	18·4	13·9
Western Australia.	341,156	822,125	5,068,101	0·9	1·4	9·3
Tasmania	2,027,781	2,411,428	2,111,593	5·5	4·0	3·9
New Zealand.....	2,990,056	2,719,110	2,377,375	8·0	4·5	4·4
Australasian Exports & Imports	37,156,289	60,114,797	54,490,030	100·0	100·0	100·0

Extra-Australasian Trade.

If Australasia be regarded as a whole, and an elimination made of the legitimate trade which the provinces carry on with each other, as well as the value of the goods which pass through one colony on their way to another, as shown under the heading of Inter-colonial trade, the total and average amounts will, of course, be greatly reduced. Such an elimination has been made in the following table,

which shows the growth since 1861 of what may be called the external trade — that is, trade transacted with all countries outside of Australasia :—

Year.	External Trade.	
	Total Value.	Value per head.
	£	£ s. d.
1861	35,061,282	28 3 10
1871	39,729,016	20 10 10
1881	64,554,678	23 6 3
1891	84,651,488	22 0 8
1896	74,649,591	17 8 9

By far the greater part of the external trade of Australasia is carried on with the United Kingdom ; and of the remainder the larger proportion is transacted with foreign countries, principally France, Germany, Belgium, and the United States, while the trade with British possessions has of late years considerably declined. The subjoined table shows the distribution of the external trade between the three divisions named :—

Trade with—		1861.	1871.	1881.	1891.	1896.
		£	£	£	£	£
The United Kingdom	Imports ..	13,467,370	12,006,419	25,662,185	30,823,474	24,967,037
	Exports ..	12,207,228	18,486,703	24,342,422	32,638,841	29,172,801
	Total....	25,674,598	30,493,122	50,004,607	63,462,315	54,139,838
British Possessions..	Imports ..	1,767,391	2,382,148	3,078,195	3,094,417	2,525,829
	Exports ..	3,656,065	764,652	4,257,961	2,231,608	2,065,103
	Total....	5,423,456	3,146,800	7,336,156	5,326,025	4,590,932
Foreign Countries ..	Imports ..	3,216,738	2,245,124	4,603,326	7,490,424	7,015,290
	Exports ..	746,490	3,843,970	2,610,589	8,372,724	8,903,531
	Total....	3,963,228	6,089,094	7,213,915	15,863,148	15,918,821
Total	Imports ..	18,451,499	16,633,691	33,343,706	41,408,315	34,508,156
	Exports ..	16,609,783	23,095,325	31,210,972	43,243,173	40,141,435
	Total....	35,061,282	39,729,016	64,554,678	84,651,488	74,649,591

Prior to the year 1883 the European trade of Australasia was almost exclusively carried on with the United Kingdom, but since that time direct commercial relations have been established with the leading Continental countries. The British trade increased during the ten years ended 1891 by £13,457,708, equal to nearly 27 per cent.; while the trade with foreign countries increased during the same period by £8,649,233, or nearly 120 per cent. From 1891 to 1896, chiefly due to causes which have already been explained, and to the cultivation of direct business relations with the Continent of Europe, trade with the United Kingdom decreased by £9,322,477; while, despite the depression, the foreign trade increased during the same period by a small sum, viz., £55,673. The trade with British possessions has never been of much value, and is now less than formerly, having fallen from £7,336,156 in 1881 to £5,326,025 in 1891 and £4,590,932 in 1896. As compared with 1891, the year 1896 shows a decrease in trade with the United Kingdom of 14·69 per cent., and with British possessions of 13·80 per cent.; while with foreign countries there has been an increase of 0·35 per cent.

The following table shows the value of the goods imported direct from each of the principal countries during the years 1881, 1891, and 1896 :—

Imports direct from—	1881.	1891.	1896.
British Empire—	£	£	£
United Kingdom	25,662,185	30,823,474	24,967,037
India and Ceylon	842,943	1,258,072	1,109,727
Canadian Dominion	100,478	151,727	133,477
Cape Colony	1,303	382	1,944
Fiji	63,190	332,774	317,172
Mauritius	1,364,421	459,179	307,941
Hongkong	642,308	648,785	354,142
Straits Settlements	59,043	188,571	246,231
Other Possessions	4,509	54,927	55,195
Total	28,740,380	33,917,891	27,492,866
Foreign Countries—			
France and New Caledonia	340,750	369,035	410,316
Germany	225,672	1,773,277	1,680,912
Italy	7,874	58,484	98,036
Belgium	26,713	321,025	310,905
Sweden and Norway	259,156	459,414	194,937
United States	1,593,088	2,920,115	3,346,460
Netherlands and Java	466,444	654,660	277,771
South Sea Islands	124,447	78,285	161,909
China	1,430,993	699,143	298,813
Japan	23,245	61,286	123,828
Other Countries	104,944	95,700	111,403
Total	4,603,326	7,490,424	7,015,290
Total, British and foreign	33,343,706	41,408,315	34,508,156

The external exports for the same periods were as follow :—

Exports direct to—	1881.	1891.	1896.
British Empire—	£	£	£
United Kingdom	24,342,422	32,638,841	29,172,801
India and Ceylon	3,153,835	1,000,871	1,214,683
Canadian Dominion	.....	40	11,683
Cape Colony	314,460	171,412	83,351
Fiji	157,913	166,326	148,264
Mauritius	95,475	107,151	38,713
Hongkong	359,934	491,771	331,862
Straits Settlements	38,767	151,243	92,932
Other Possessions	137,577	142,794	143,615
Total	28,600,383	34,870,449	31,237,904
Foreign Countries—			
France and New Caledonia	336,498	1,835,784	2,559,840
Germany	70,422	863,815	1,541,572
Italy	152,914	27,999	43,737
Belgium	100,437	1,485,731	1,322,370
Sweden and Norway	.....	.....	1,214
United States	1,298,905	3,269,261	2,686,656
Netherlands and Java	52,192	92,645	83,333
South Sea Islands	140,299	149,370	305,114
China	78,599	30,749	30,892
Japan	6,872	16,578	110,128
Other Countries	373,451	600,792	218,675
Total	2,610,589	8,372,724	8,903,531
Total, British and foreign	31,210,972	43,243,173	40,141,435

The values of the combined imports and exports were as given below :—

Total direct trade with—	1881.	1891.	1896.
British Empire—	£	£	£
United Kingdom	50,004,607	63,462,315	54,139,838
India and Ceylon	3,996,778	2,258,943	2,324,410
Canadian Dominion	100,478	151,767	145,160
Cape Colony	315,763	171,794	85,295
Fiji	221,103	499,100	465,436
Mauritius	1,459,896	566,330	346,654
Hongkong	1,002,242	1,140,556	686,004
Straits Settlements	97,810	339,814	339,163
Other Possessions	142,086	197,721	198,810
Total British	57,340,763	68,788,340	58,730,770
Foreign Countries—			
France and New Caledonia	677,248	2,204,819	2,970,156
Germany	296,094	2,637,092	3,222,484
Italy	160,788	86,483	141,773
Belgium	127,150	1,806,756	1,633,275
Sweden and Norway	259,156	459,414	196,151
United States	2,891,993	6,189,376	6,033,116
Netherlands and Java	518,636	747,305	361,104
South Sea Islands	264,746	227,655	467,023
China	1,509,592	729,892	329,705
Japan	30,117	77,864	233,956
Other Countries	478,395	696,492	330,078
Total Foreign	7,213,915	15,863,148	15,918,821
Total British and Foreign	64,554,678	84,651,488	74,649,591

Trade with the United Kingdom.

In order to make a useful comparison of the value of the Australasian trade to the United Kingdom, it is necessary to use the British Board of Trade returns, and these returns have been used in the ensuing comparisons. The figures relating to Australasia, especially for late years, approximate very closely to the local Customs statistics. From the table it will be observed that while in 1881 the produce of these colonies formed 29·5 per cent. of the imports of the United Kingdom from her possessions, in 1891 the proportion was 31·4 per cent., and in 1896 rather more, viz., 31·5 per cent :—

Year.	As returned by British Customs.		Proportion of Imports from Australasia to total from British Possessions.
	Total Imports from British Possessions.	Imports from Australasia.	
	£	£	per cent.
1881	91,539,660	26,975,381	29·5
1891	99,464,718	31,261,566	31·4
1896	93,208,029	29,402,430	31·5

Although it is very little more than a century since the commencement of Australasian settlement, an examination of the trade statistics of the mother country with her numerous dependencies shows that the trade of these colonies with the United Kingdom is now only exceeded by that of India, while it is considerably more than double that of Canada, and in a larger degree exceeds the trade of any other British possession. The following table, which is also compiled from the returns of the Board of Trade, shows the total trade of the United Kingdom, exclusive of specie, for the three years 1881, 1891, and 1896, with the most important of Great Britain's colonies and possessions :—

Country.	1881.	1891.	1896.	Proportion of Trade of United Kingdom with British possessions.		
				1881.	1891.	1896.
	£	£	£	per cent	per cent	per cent
India	63,682,398	64,783,605	56,127,018	35·7	33·6	30·5
British North America	20,608,159	20,906,357	23,140,079	11·6	10·8	12·6
Cape Colony and Natal	13,105,264	14,892,965	20,139,595	7·4	7·7	11·0
Straits Settlements	6,527,675	7,946,127	6,382,848	3·7	4·1	3·5
Hongkong	4,815,905	3,833,859	2,756,367	2·7	2·0	1·5
Australasia	50,957,785	59,493,319	53,728,781	28·6	30·9	29·2

If, again, a comparison be made of the total trade transacted by the United Kingdom with all countries during the year 1896, it will be found that the trade with Australasia, amounting to £53,728,781 as shown above, was only exceeded by that carried on with four countries, namely, the United States, with a total of £138,383,133; France, with £70,762,499; Germany, with £61,570,141; and British India, with £56,127,018. The amounts taken by other countries will be found below, and it must be noted that the values given do not include specie:—

Country.	1881.	1891.	1896.	Proportion to Total Trade of United Kingdom.		
				1881.	1891.	1896.
	£	£	£	per cent	per cent	per cent
France	70,069,848	69,114,136	70,762,499	10·1	9·3	9·6
Germany	52,927,199	56,976,104	61,570,141	7·6	7·7	8·3
Belgium	25,047,833	30,525,737	31,548,042	3·6	4·1	4·3
Holland	38,295,414	42,290,587	41,591,147	5·5	5·7	5·6
Spain	14,421,326	16,050,936	15,896,289	2·1	2·2	2·2
Italy	10,792,615	10,272,329	9,089,985	1·6	1·2	1·2
United States	139,990,876	145,475,197	138,383,133	20·2	19·5	18·7
Argentine Republic	4,000,090	7,817,256	15,829,909	0·6	1·0	2·1
Chili	5,417,363	5,916,225	6,325,533	0·8	0·8	0·9
Brazil	13,254,733	12,855,202	11,036,709	1·9	1·7	1·5
Uruguay	1,881,522	1,568,891	1,791,601	0·3	0·2	0·2
Australasia	50,957,785	59,493,319	53,728,781	7·3	8·0	7·3

Trade with Foreign Countries.

Every year steamers of greater tonnage and higher speed are visiting the colonies from Europe, and a considerable expansion of commerce must of necessity take place, owing to the new outlets for trade which have been opened up thereby. The value of Australasian imports from the principal foreign countries may be traced below from the year 1861:—

Country.	1861.	1871.	1881.	1891.	1896.
	£	£	£	£	£
Belgium	.....	.....	26,713	321,025	310,905
France and New Caledonia	136,124	158,992	340,750	369,035	410,316
Germany	109,172	3,899	225,672	1,773,277	1,680,912
Netherlands and Java	114,304	194,519	466,444	654,660	277,771
Italy	.....	.....	7,874	58,484	98,036
Sweden and Norway	22,666	106,720	259,156	459,414	194,937
China	827,347	874,925	1,430,993	699,143	298,813
Japan	.....	.....	23,245	61,286	123,828
South Sea Islands	40,200	135,060	124,447	78,285	161,909
United States	1,080,673	616,625	1,593,088	2,920,115	3,346,460
Other Countries	886,252	154,384	104,944	95,700	111,403
Total	3,216,738	2,245,124	4,603,326	7,490,424	7,015,290

The exports from Australasia to the countries mentioned in the preceding table are appended :—

Country.	1861.	1871.	1881.	1891.	1896.
	£	£	£	£	£
Belgium	.....	.....	100,437	1,485,731	1,322,370
France and New Caledonia	26,793	101,758	336,498	1,835,784	2,559,840
Germany	.....	.....	70,422	863,815	1,541,572
Netherlands and Java	3,907	39,517	52,192	92,645	83,333
Italy	.....	.....	152,914	27,999	43,737
Sweden and Norway	.....	.....	.....	.....	1,214
China	114,149	29,137	78,599	30,749	30,892
Japan	1,805	9,470	6,872	16,578	110,128
South Sea Islands	36,130	153,568	140,299	149,370	305,114
United States	76,154	367,361	1,298,905	3,269,261	2,686,656
Other Countries	487,552	3,143,159	373,451	600,792	218,675
Total	746,490	3,843,970	2,610,589	8,372,724	8,903,531

The commerce with foreign countries from the commencement of the period under review exhibits very satisfactory progress; the imports have increased 118·09 per cent., while the exports have grown to nearly twelve times their original value, the increase in the total trade being 301·66 per cent. This expansion is chiefly due to the development of the European continental trade, consequent on the diversion of part of the wool business from London, which was largely brought about by the display of local resources at the Sydney and Melbourne International Exhibitions of 1879 and 1880. The annual increase per cent. of the trade of the Australasian colonies with the four principal foreign countries with which they have commercial relations is shown below, the period covered being the fifteen years extending from 1881 to 1896 :—

Country.	Imports.	Exports.	Total Trade.
	per cent.	per cent.	per cent.
Belgium	17·78	18·75	18·55
France and New Caledonia	1·25	14·49	10·36
Germany	14·32	22·84	17·25
United States	5·07	4·96	5·02

The trade with Belgium exhibits the greatest progress, but Antwerp, the port from which a great portion of German and French manufactures is shipped, is also the distributing centre for a considerable part of the wool destined for the Continent, and large quantities of this product landed there ultimately find their way to Germany, France, and other countries. The French, early in 1883, were the first to establish direct commercial relations with these colonies, the steamers of the Messageries Maritimes, a subsidised line, making their appearance for the first time in Australian waters in the year named. In 1887 the vessels of the Norddeutscher Lloyd Company, of Bremen, commenced trading with Australasia; and

in the latter part of 1888 a line of German cargo-boats opened up further communication between the great wool-exporting cities of Sydney, Melbourne, and Adelaide and the ports of Antwerp, Hamburg, and Dunkirk. Belgium has also established a line of steamships; and the latest foreign testimony to the growing importance of Australasia is the regular running of the Nippon Yusen Kaisha's steamers between Japanese ports and Sydney. In addition to the companies mentioned, some British lines run their vessels direct to Continental ports.

The result of these efforts to establish commercial relations is evident from the increase of trade which the foregoing table discloses, and from the diversion, now rapidly being effected, in the channel by which the wool required for Europe reaches the market. The example of the South American Republics, the bulk of whose produce now finds a market at the ports of Antwerp, Hamburg, Havre, and Dunkirk without passing through London, was not lost on Continental buyers. It was manifest that direct shipments of wool to Europe could as readily be made from Sydney or Melbourne as from Buenos Ayres or Monte Video; hence the presence in the local markets, in increasing numbers, of buyers representing Continental firms.

Australasia has for many years maintained important commercial relations with the United States of America, and in 1896 America's share of the trade of Australasia with foreign countries was about 38 per cent. The greater part of this trade was carried on with the colonies of New South Wales, Victoria, and New Zealand. The main exports to the United States are specie, wool, coal, kauri gum, and New Zealand flax—chiefly the two first mentioned; so that, though large in its nominal amount, the trade is less valuable than would at first sight appear. The export of wool, which had formerly been unimportant, amounted in 1891 to £514,551, an increase of £325,314 over the total of the previous year; but this high value has not been maintained, and owing to tariff changes in the United States there was a fall to £228,040 in 1894, followed by a rise to £441,049 in 1896.

Under present conditions no extension of commercial relations with the United States can be looked forward to; but trade with the East gives good promise for the future, especially with India, China, Japan, and the East Indian Archipelago, where markets for Australasian wool will possibly in time be found—little in that direction having been accomplished up to the present time. As mentioned above, Japan has established a national line of steamers to foster the trade between that country and Australasia; and with the abolition of the duty on wool, and the benefits to be derived from wearing woollen clothing impressed upon the people, there ought to be a good opening in that country for the staple product of these colonies. The foundation of such a trade has already been laid down, the exports of wool from New South Wales ports to Japan in 1896 being valued at about £45,000. A large amount of business is already transacted with India and Ceylon, and this trade bids fair to increase, particularly in the tea of those places, which now

strongly competes with the Chinese leaf in public estimation. The value of the direct import of Indian teas increased from £280,780 in 1890 to £506,980 in 1896; while the imports of this article from China decreased from £788,943 in 1890 to £201,781 in 1896.

The Australasian exports to China are but small compared with the imports, and evince a considerable falling-off since 1861. The Customs returns, however, do not represent the whole amount of the trade with China, as a considerable portion of the commerce with Hongkong is in reality transacted with the Chinese Empire, Hongkong being to a large extent a distributing centre for the Empire. In view of this fact, the following table, showing the trade with the Chinese Empire and Hongkong, has been compiled :—

Country.	Imports.			Exports.		
	1890.	1891.	1896.	1890.	1891.	1896.
	£	£	£	£	£	£
Chinese Empire	706,131	699,143	298,813	56,269	30,749	30,892
Hongkong	753,853	648,785	354,142	451,456	491,771	331,862
Total	1,459,984	1,347,928	652,955	507,725	522,520	362,754

Trade with the South Pacific Islands, which on the whole may be said to be increasing, consists mostly of the importation of raw articles in exchange for Australasian produce. The bulk of the trade is done with Fiji and New Caledonia, the French colony dealing principally with New South Wales, as Sydney is the terminal port for the mail-steamers of the Messageries line. But owing to the enforcement of the new French Customs tariff, which is highly protective in its character in the colonies of that country as well as in France itself, the New Caledonian trade bids fair to be lost to Sydney; for while the exports from New South Wales to New Caledonia in 1892 amounted to £184,128, they had fallen in 1896 to £110,335, or by more than 40 per cent. The trade with New Guinea is at present but small, though when the resources of that prolific island come to be developed a large increase may be expected. Besides the countries mentioned, Australasia maintains a not inconsiderable trade with Java and Scandinavia, but it consists mainly of imports.

The figures relating to the trade of each colony with countries outside Australasia would be extremely interesting if they could be given with exactness. Unfortunately this is impossible, as the destination of goods exported overland cannot be traced beyond the colony to which they are in the first instance despatched—all that can be given is the trade by

sea, which the following series of tables shows. The imports from countries outside Australasia were as follow :—

Colony.	Total Value.			Value per Inhabitant.					
	1881.	1891.	1896.	1881.			1891.			1896.		
	£	£	£	£	s.	d.	£	s.	d.	£	s.	d.
New South Wales	11,357,096	14,256,219	11,001,650	14	18	9	12	9	4	8	10	10
Victoria	10,768,791	13,045,493	8,334,222	12	7	6	11	7	9	7	1	6
Queensland	1,492,305	3,183,209	3,078,488	6	14	3	7	18	6	6	12	0
South Australia	3,566,917	4,038,763	3,258,927	12	17	7	12	10	1	9	1	8
Western Australia	208,743	695,358	2,388,415	7	1	5	13	12	11	19	19	5
Tasmania	445,576	698,973	399,508	3	16	3	4	13	10	2	8	11
New Zealand	5,504,278	5,490,300	6,046,946	11	3	4	8	14	4	8	11	2
Australasia	33,343,706	41,408,315	34,508,156	12	0	10	10	15	7	8	1	8

The exports to countries outside Australasia were as follow :—

Colony.	Total Value.			Value per Inhabitant.					
	1881.	1891.	1896.	1881.			1891.			1896.		
	£	£	£	£	s.	d.	£	s.	d.	£	s.	d.
New South Wales	9,326,349	14,340,850	14,635,523	12	5	4	12	10	10	11	7	4
Victoria	11,515,661	11,097,653	8,848,336	13	4	8	9	13	9	7	10	2
Queensland	1,301,400	3,378,816	3,677,436	5	17	1	8	8	3	7	17	9
South Australia	3,172,920	5,620,561	4,080,884	11	9	2	17	8	0	11	7	6
Western Australia	357,702	562,076	687,267	12	2	4	11	0	7	5	14	11
Tasmania	513,363	382,381	177,885	4	7	10	2	11	4	1	1	9
New Zealand	5,023,577	7,860,836	8,034,104	10	3	10	12	9	7	11	7	6
Australasia	31,210,972	43,243,173	40,141,435	11	5	5	11	5	1	9	7	6

The total extra-Australasian trade was therefore as follows :—

Colony.	Total Value.			Value per Inhabitant.					
	1881.	1891.	1896.	1881.			1891.			1896.		
	£	£	£	£	s.	d.	£	s.	d.	£	s.	d.
New South Wales	20,683,445	28,597,069	25,637,173	27	4	1	25	0	2	19	18	2
Victoria	22,284,452	24,143,146	17,182,558	25	12	2	21	1	6	14	11	8
Queensland	2,793,705	6,562,025	6,755,924	12	11	4	16	6	9	14	9	9
South Australia	6,739,837	9,659,324	7,339,811	24	6	9	29	18	1	20	9	2
Western Australia	566,445	1,257,434	3,075,682	19	3	9	24	13	6	25	14	4
Tasmania	958,939	1,081,354	577,393	8	4	1	7	5	2	3	10	8
New Zealand	10,527,855	13,351,136	14,081,050	21	7	2	21	3	11	19	18	8
Australasia	64,554,678	84,651,488	74,649,591	23	6	3	22	0	8	17	8	9

It will be seen that the growth of the import and export trade of the various colonies has not been uniform. The imports of New South Wales in 1891 exceeded those in 1881 by nearly 3 millions sterling, while in 1896 they were over £350,000 less than they were in 1881. The exports of 1891 exceeded those of 1881 by over 5 millions, but from 1891 to 1896 they increased by less than £300,000. The Victorian imports increased from 1881 to 1891 in about the same ratio, but in 1896 they were nearly 2½ millions less than in 1881; while the exports,

both in 1891 and 1896, were less than in 1881. The Tasmanian import trade in 1896 was only eight-ninths that of 1881, while the exports in 1896 exhibit a falling-off of over 65 per cent. as compared with those of 1881. The South Australian imports were £300,000 less in 1896 than they were in 1881; while the exports, which in 1891 nearly doubled those of 1881, shrunk by about £1,540,000 during the next five years. The value of the New Zealand imports in 1896 was only about half-a-million more than in 1881, but the exports increased during the period by nearly 60 per cent. The Queensland imports more than doubled from 1881 to 1891, but from the latter year they had shrunk by about £100,000 in 1896; the exports, however, increased steadily, and in 1896 were over 180 per cent. larger than in 1881. The imports of Western Australia increased from 1881 to 1891 and from 1891 to 1896 more than threefold during each period, while the exports increased by rather more than 20 per cent. from 1891 to 1896, nearly all the Western Australian gold being exported by way of the other colonies. No rigid deductions, however, can be drawn from the facts just given; for, as is well known, some of the provinces—notably Queensland and Tasmania—are not yet in a position to maintain a direct foreign trade, and in a forced comparison with the rest of Australasia are apt to suffer.

If the total trade of 1896 be considered, New South Wales heads the list with a commerce valued at £25,637,173; Victoria, with £17,182,558, being second; while New Zealand ranks third, with a trade of £14,081,050. Taking all the colonies together, the external imports and exports combined equal a trade of £17 8s. 9d. per inhabitant—a falling-off of £4 11s. 11d. as compared with 1891, and of £5 17s. 6d. as compared with 1881. It is interesting to compare the volume of the external trade of Australasia with the latest returns of other countries. This is afforded by the following table, in which the figures refer to the year 1896 :—

Country.	Total Trade.			Per Inhabitant.
	Merchandise.	Specie and Bullion.	Total.	
	£	£	£	£ s. d.
United Kingdom	738,188,118	83,969,755	822,157,873	20 16 8
France	380,896,000	42,238,000	423,134,000	10 19 8
Germany	427,555,000	25,005,000	452,560,000	8 13 3
Italy	97,026,000	1,208,000	98,234,000	3 2 9
Belgium	230,307,000	16,441,000	246,748,000	40 13 1
Spain	67,643,000	9,670,000	77,313,000	4 4 11
Cape Colony	35,741,539	9,166,597	44,908,136	25 8 9
Canada	47,075,286	2,039,514	49,114,800	9 13 3
Chili	30,589,000	1,228,000	31,817,000	12 11 9
United States	346,319,000	49,012,000	395,331,000	6 6 3
Australasia	67,976,478	6,673,113	74,649,591	17 8 9

The trade of Australasia per head of population exceeds that of any country appearing in the list, the United Kingdom, Belgium, and the Cape Colony excepted. In the case of Belgium it is but proper to remark that about one-half of the trade credited to it comprises goods in transit, while the United Kingdom itself is also a great distributing centre, and the trade returns of the Cape Colony are swollen by the gold from the Transvaal passing through the country on its way tc Europe.

An excess in the value of imports over exports was for many years a prominent feature of the trade of Australasia taken as a whole, although in some colonies the reverse was the case. The surplus of imports was due to two causes: (1) the importation, by the Governments and local bodies of the various colonies, of money to cover the cost of construction of public works; and (2) the private capital sent to Australasia for investment. Taking the colonies as a whole, these two items combined exceeded the payments made for interest on past loans, both public and private, and the sums drawn from the country by absentees; but as nearly all the colonies have ceased to borrow, or the amount of their borrowing has fallen below their yearly payments for interest, the whole of Australasia now shows an excess of exports, the only colonies having an excess of imports in 1896 being Victoria and Western Australia. The present excess of exports and its cause come more properly within the parts of this work dealing with Public and Private Finance, and are dealt with at some length there.

Exports of Domestic Produce.

The values of the exports of Australasia and of its various provinces have been given in the previous pages without respect to the countries where the articles were produced. It is important to find to what extent the exports have been the produce of each of the colonies whence they were shipped. The following table shows the value of the exports of domestic produce of each colony as returned by the Customs for the years 1881, 1891, and 1896, and the value thereof per inhabitant:—

Colony.	Total Value.			Value per Inhabitant.		
	1881.	1891.	1896.	1881.	1891.	1896.
	£	£	£	£ s. d.	£ s. d.	£ s. d.
New South Wales ..	10,784,327	21,085,712	16,742,691	14 1 11	18 8 9	13 0 0
Victoria	12,480,567	13,026,426	11,054,824	14 6 10	11 7 6	9 7 8
Queensland	3,478,376	7,979,080	8,924,186	15 12 11	19 17 4	19 2 9
South Australia	3,755,781	4,810,512	3,383,138	13 11 3	14 17 10	9 8 7
Western Australia ..	498,634	788,873	1,603,748	16 17 10	15 9 7	13 8 2
Tasmania	1,548,116	1,367,927	1,473,429	13 5 0	9 3 8	9 0 3
New Zealand.....	5,762,250	9,400,094	9,177,336	11 13 9	14 18 6	12 19 10
Australasia	38,308,051	58,458,624	52,359,352	13 15 11	15 4 4	12 5 6

These figures, however, must be regarded as merely approximate, for it is difficult to ascertain with exactitude the domestic exports of some of the colonies. This is especially the case with Victoria, and in a lesser degree with New South Wales and South Australia. In the first-mentioned colony large quantities of wool, the produce of the other provinces, chiefly of New South Wales, are exported as domestic produce, the value of the staple dealt with in this way in 1896 being no less than £1,323,055. There is also an export by South Australia, as local produce, of wool grown in New South Wales, but the value thereof is by no means large. Wool, chiefly from Queensland, has in some years been exported as domestic produce by New South Wales, but in 1896 no such overstatement took place. Also, as regards New South Wales, tin and copper ore, the former chiefly from Queensland and Tasmania and the latter from South Australia, which are imported for the purpose of being refined, are exported as domestic produce. Likewise, Queensland cattle, after being fattened on New South Wales pastures, are exported as local produce; but in all these cases a material change is wrought in the imports, which is not the case with wool. An attempt has been made to remove these elements of error from the returns as they are presented by the Customs, and the amounts shown in the following table may be accepted as the true values of domestic produce exported by each colony during 1896:—

Colony.	Domestic Exports.		
	Total Value.	Proportion to Total.	Value per Head.
	£	per cent.	£ s. d.
New South Wales	16,740,469	32·8	13 0 0
Victoria	9,731,769	19·1	8 5 2
Queensland	8,924,186	17·5	19 2 9
South Australia	3,347,079	6·6	9 6 7
Western Australia	1,603,748	3·1	13 8 2
Tasmania	1,473,283	2·9	9 0 3
New Zealand	9,177,063	18·0	12 19 10
Australasia	50,997,597	100·0	11 18 3

Placing the values of the external exports of domestic production of Australasia side by side with those of some of the more important countries of the world, a useful comparison is afforded, and from whatever standpoint the matter be viewed these colonies appear in a very favourable light. The following table shows the value of the domestic exports, exclusive of coin and bullion, of some of the principal countries of the world, the figures referring to the year 1896. The figures for Australasia only represent the external exports of domestic produce;

in the preceding table the values include the domestic produce of each colony consumed in the other provinces :—

Country.	Exports of Domestic Produce (exclusive of Coin and Bullion).	Per Inhabitant.
	£	£ s. d.
United Kingdom	240,145,551	6 1 8
France	136,036,000	3 10 8
Germany	176,255,000	3 7 6
Austria-Hungary	64,500,000	1 11 2
Italy	42,084,000	1 6 11
Belgium	58,718,000	9 13 6
Canada	21,858,950	4 6 0
Argentine Republic	23,360,000	5 17 10
United States	179,833,000	2 17 5
Australasia	26,106,484	6 2 0

The extent to which the geographical position of a colony enables it to benefit by the production of its neighbours is illustrated by the proportion which the non-domestic bear to the total exports. The following table shows the value of the re-export trade and the proportion which it bears to the total export trade of each colony in 1896 ; and it would appear that South Australia, Victoria, and New South Wales, in the order named, benefit largely by their position, the re-export trade of the other colonies being insignificant :—

Colony.	Re-exports.	Proportion to Total Exports.
	£	per cent.
New South Wales	6,269,880	27·2
Victoria	4,466,749	31·5
Queensland	239,540	2·6
South Australia	4,357,795	56·6
Western Australia	46,478	2·8
Tasmania	23,293	1·6
New Zealand	144,042	1·5
Australasia	15,547,777	23·4

Three-fifths of this re-export trade is external, the amount being £9,189,117, as compared with £6,358,660 of intercolonial trade.

The Wool Trade.

The rapid growth of the Continental wool trade during the periods from 1881 to 1891, and from 1891 to 1896, is illustrated by the following table, which shows the value of the staple exported direct to the

principal countries, and the proportion of the total amount taken by each :—

Country.	Value.			Proportion.		
	1881.	1891.	1896.	1881.	1891.	1896.
	£	£	£	per cent	per cent	per cent
United Kingdom ...	15,777,327	19,891,218	15,650,777	97·8	82·7	76·6
Belgium	96,557	1,453,755	1,066,563	0·6	6·0	5·2
Germany	53,809	782,676	1,134,824	0·3	3·3	5·6
France	26,965	1,386,768	2,073,254	0·2	5·8	10·1
United States	132,699	514,551	441,049	0·8	2·1	2·2
Other Countries ...	48,725	34,259	67,388	0·3	0·1	0·3
Total.....	16,136,082	24,063,227	20,433,855	100·0	100·0	100·0

The value of the wool shipped from Australasia has thus increased by over four and a quarter millions sterling, or almost 27 per cent., during the last fifteen years. It will be observed that the wool exported to the United Kingdom has decreased in value to the extent of £127,000, or from 97·8 to 76·6 per cent., while the export to foreign countries has increased both absolutely and relatively.

It is necessary to point out here that all the figures in the present chapter dealing with the export of wool are based on the Customs returns of the different colonies, and represent the values placed on the wool by the exporters. The figures relating to the value of the wool clip which are given in the chapter on the pastoral industry are less than those just given, the difference being made up of the cost of carriage and other charges from the sheep-runs to the ship's side.

The following table shows the total and proportionate value of the wool shipped direct to countries outside Australasia by each colony :—

Colony.	Value.			Proportion.		
	1881.	1891.	1896.	1881.	1891.	1896.
	£	£	£	per cent	per cent	per cent
New South Wales..	4,485,295	7,917,587	7,434,374	27·8	32·9	36·4
Victoria..	5,327,934	7,070,661	4,929,171	33·0	29·4	24·1
Queensland	996,047	2,438,321	1,776,184	6·2	10·1	8·7
South Australia ...	1,747,696	1,888,107	1,519,181	10·8	7·8	7·4
Western Australia.	256,689	311,925	264,235	1·6	1·3	1·3
Tasmania	416,572	313,422	135,885	2·6	1·3	0·7
New Zealand	2,905,849	4,123,204	4,374,825	18·0	17·2	21·4
Australasia ...	16,136,082	24,063,227	20,433,855	100·0	100·0	100·0

It will be seen from the table just given that Victoria was credited in 1881 with exporting wool to a considerable value in excess of that of New South Wales. In 1891 and 1896, however, the positions were reversed, notwithstanding the fact that large quantities of wool from New South Wales are still sent to Melbourne for shipment. In 1881 the wool produced in other colonies, chiefly New South Wales, but credited to Victoria, was valued at £2,780,600; in 1891, £2,767,000; and in 1896, £1,323,000; while the wool imported from other colonies and credited to New South Wales for the year 1891 was £109,000, while for 1896 there was no such over-statement. South Australia also receives a large quantity of New South Wales wool for shipment, though not nearly to so great an extent as Victoria.

In connection with this subject, a statement of the value of wool of its own production which each colony exports direct and by way of the other colonies may not be without interest. The figures, which are given below, relate to the year 1896:—

Colony.	Domestic Wool Exported.			Proportion of Export of Australasia.
	Direct.	By way of the other colonies.	Total.	
	£	£	£	per cent.
New South Wales	6,480,888	2,329,487	8,810,375	42·7
Victoria	2,658,675	30,233	2,688,908	13·1
Queensland	1,768,958	1,208,026	2,976,984	14·4
South Australia	1,024,516	176,478	1,200,994	5·8
Western Australia	264,235	3,271	267,506	1·3
Tasmania	135,739	155,086	290,825	1·4
New Zealand	4,374,552	17,023	4,391,575	21·3
Australasia	16,707,563	3,919,604	20,627,167	100·0

In the table given on the preceding page the value of the direct export of wool is quoted at £20,433,855. The apparent discrepancy, however, is of no moment when it is remembered that about one-fifth of the clip of Australasia is subject to valuation first at the border of the colony in which it is produced, and again at the port from which it is finally shipped to Europe or America. In the amount of £20,627,167 shown above is, besides, included the value of such wool as was exported during 1896 to one of the adjacent colonies, and there held over for the sales in January of the following year.

The following figures serve to illustrate the development of the local wool sales in those colonies where such sales are held, viz., in New South

Wales, Victoria, South Australia, and New Zealand, for the ten seasons from 1887–8 to 1896–7. The seasons are taken as extending from the 1st July to the 30th June. The number of bales sold during each period shown was as follows:—

Season.	New South Wales.	Victoria.	South Australia.	New Zealand.	Total.
	bales.	bales.	bales.	bales.	bales.
1887–88	162,511	188,050	34,481	36,458	421,500
1888–89	198,517	214,876	43,568	50,303	507,264
1889–90	227,599	279,360	47,298	57,519	611,776
1890–91	232,856	247,508	43,799	57,166	581,329
1891–92	284,708	292,694	58,011	62,456	697,869
1892–93	362,688	310,828	54,285	85,505	813,306
1893–94	401,185	305,700	65,000	82,547	854,432
1894–95	425,135	328,142	64,056	82,547	899,880
1895–96	415,538	315,543	80,234	82,965	894,280
1896–97	401,048	310,835	63,804	82,515	858,202

The importance of the pastoral industry to Australasia will be made clear in another part of this volume. Its value to each colony varies considerably, as the statement hereunder shows. In no colony, however, Western Australia excepted, does the proportion of exports of this class fall below 25 per cent. of the total value of domestic produce exported. In the case of New South Wales it reaches about 66 per cent., while in New Zealand it is 68 per cent., and in Queensland 62 per cent. :—

Colony.	Wool.	Other Pastoral Produce.	Total.	Proportion of Exports of Pastoral Produce to Total Exports of Domestic Products.
	£	£	£	per cent.
New South Wales.....	8,810,375	2,195,372	11,005,747	65·7
Victoria	2,688,908	1,216,902	3,905,810	40·1
Queensland.....	2,976,984	2,570,265	5,547,249	62·2
South Australia.....	1,200,994	423,505	1,624,499	48·5
Western Australia.....	267,506	19,337	286,843	17·9
Tasmania	290,825	81,774	372,599	25·3
New Zealand.....	4,391,575	1,886,356	6,277,931	68·4
Australasia—				
All Domestic	20,627,167	8,393,511	29,020,678	56·9
External Domestic.....	16,707,563	5,618,544	22,326,107	72·1

It will be observed that the figures given in this table are not those furnished by the various Customs' Departments; they have been corrected in the manner already explained in order to allow for the incorrect information furnished by shippers in regard to the colony of origin.

Movements of Gold.

Since the discovery of gold in the year 1851 large quantities of the metal—in the form of coin as well as of bullion—have been exported from the Australasian colonies every year. In the figures given below, showing the excess of exports of gold of each colony, no attempt has been made to exclude the intercolonial trade. The largest exporters, it will be found, are also the largest producers, namely, Victoria, New Zealand, and Queensland. The other colonies, except Western Australia, now produce very little more than what suffices to meet their requirements. The returns of the gold imports and exports for New South Wales are swollen by large quantities of Queensland gold sent to Sydney to be minted and then exported in the shape of coin, but only the excess of exports appears in the following table :—

Colony.	1851-60.	1861-70.	1871-80.	1881-90.	1891-96.	1851-96.
	£	£	£	£	£	£
New South Wales	8,337,067	13,656,650	5,248,994	277,509	1,840,597	29,360,817
Victoria	86,342,134	62,609,042	37,222,632	23,106,371	10,008,007	219,288,186
Queensland	.....	1,768,575	9,430,137	11,540,245	11,625,224	34,364,181
South Australia	1,900,955	*395,633	*1,100,309	*673,548	*32,339	*300,874
Western Australia	.....	19,586	*38,000	*44,320	1,177,385	1,114,651
Tasmania	843,029	*34,255	165,040	872,754	814,535	2,661,103
New Zealand.....	48,981	20,294,822	14,215,143	7,637,381	4,563,404	46,759,731
Total Excess of Exports..	97,472,166	97,918,787	65,143,637	42,716,392	29,996,813	333,247,795
Average per annum	9,747,217	9,791,879	6,514,364	4,271,639	4,999,469	7,244,517

* Excess of Imports.

Customs Revenue.

The net revenue derived from the taxation of goods imported into Australasia during 1896 amounted to £8,090,549, which is equal to £1 17s. 10d. per inhabitant. It will be found, from a consideration of a subsequent table, that the rate per inhabitant varies very greatly, not only in a comparison of the various colonies, but for the same colony in different years. This variation arises from diverse causes. First, the

influence of good or bad times on the purchasing power of the people naturally reacts on the Customs collections, although the rise or fall of the rate per inhabitant is not always a safe indication of such influence. Certain colonies, notably Queensland, still grow insufficient agricultural produce for their own requirements, and a good season, since it enables these colonies to depend to a greater extent on their own resources, has meant a decrease in the revenue derived from the importation of agricultural produce. Similar effects have also been felt in regard to the revenue derived from live stock and other forms of produce. Then it must also be remembered that for many years the colonies have been systematic borrowers in the London market, and they have also been the recipients of much money sent for investment by private persons. As loans of all descriptions reach the borrowing country in the form of goods, and a considerable proportion of the importations is the subject of taxation, years of lavish borrowing are naturally years of large revenue collections, and coincident with the cessation of the flow of foreign capital there is a decrease in Customs revenue. Furthermore, there have been extensive alterations in the tariffs affecting the revenue during the years which the following tables cover. In New South Wales in 1891 and 1895, and in Western Australia in 1893 and 1896, radical tariff changes were made, and in other years minor alterations took place in nearly all the other colonies. To these changes is chiefly attributable any sharp rise or fall in the rate of revenue per inhabitant. At the same time, it must be allowed that tariff changes have been made which have affected the collections to a very slight extent.

Speaking generally, it may be said that the Customs revenue is declining, and is likely to decline. Apart from the specific causes mentioned above, other effective if less obtrusive influences are at work. Year by year the industries of the colonies are being developed, and the local producer is acquiring a firm hold upon the domestic markets. In several of the provinces little if any revenue is now received from duties on agricultural produce, as such produce is not imported; and many descriptions of manufactured goods have likewise ceased to be introduced, the locally-made article being produced in sufficient quantities to meet the demand. There can be no reasonable doubt that this tendency will be still more marked in the future, and it is, therefore, not surprising that Australasian Treasurers have of late years found it necessary to look to other sources than the Customs for the revenue necessary to carry on the business of the country.

So far as the duties payable may be taken as a basis of classification, the imports may be divided into two classes—one comprising intoxicants and narcotics, upon which duties equal to an average of about 136 per cent. *ad valorem* are levied, and the other consisting of imports selected for taxation at specific or *ad valorem* rates. The value of intoxicants and narcotics imported by the colonies during 1896 for home consumption was £2,651,563, while the duties collected thereon

were not less than £3,610,689, the amounts credited to each colony being as follow :—

Colony.	Imports of Intoxicants and Narcotics for home consumption.	Amount of Import Duties collected.
	£	£
New South Wales	838,248	1,017,715
Victoria	477,980	689,824
Queensland	392,028	477,957
South Australia	135,540	181,035
Western Australia	370,885	424,744
Tasmania	58,257	104,251
New Zealand	378,625	715,163
Australasia	2,651,563	3,610,689

These collections represent about 44·6 per cent. of the total Customs revenue raised, the remaining portion being distributed among the various colonies as shown below. The total value of imports for home consumption—exclusive, of course, of the value of intoxicants, narcotics, coin, and bullion—is also given. A column has been added representing the collections as an average *ad valorem* duty on the total imports for home consumption :—

Colony.	Imports for home consumption (exclusive of Coin and Bullion, and Intoxicants and Narcotics).	Amount of Import Duties collected (less duty paid on Intoxicants and Narcotics).	Average *ad valorem* Duty.
	£	£	℔ cent.
New South Wales	13,174,383	349,716	2·65
Victoria	9,445,060	1,098,294	11·63
Queensland	4,722,085	789,331	16·72
South Australia	2,550,631	393,777	15·44
Western Australia	5,095,197	574,165	11·27
Tasmania	1,108,471	224,667	20·27
New Zealand	6,534,203	1,049,910	16·07
Australasia	42,630,030	4,479,860	10·51

The comparison afforded by the last column, however, has no special value, seeing that a large proportion of the importations other than intoxicants and narcotics, about 52 per cent. for the colonies as a whole, is admitted free of duty, all the colonies except Tasmania having an extensive free list. Reckoning only goods subject to duty, the average rate of duties levied in Australasia is equal to rather more than 22 per cent. *ad valorem*. The actual *ad valorem* duty payable on dutiable goods

other than intoxicants and narcotics imported into each colony during 1896, and the proportion of such goods to the total imports, exclusive of intoxicants and narcotics, will be found in the following table :—

Colony.	Proportion of dutiable imports other than intoxicants and narcotics.	*Ad Valorem* Duty on dutiable goods, other than intoxicants and narcotics.
	per cent.	per cent.
New South Wales	11·77	22·55
Victoria	46·56	24·97
Queensland	78·70	21·24
South Australia	64·31	24·01
Western Australia	72·18	15·61
Tasmania	90·91	22·29
New Zealand	65·91	24·38
Australasia	47·61	22·07

The import duties collected in the various colonies during each of the last six years are set forth in the following table, drawbacks and refunds being deducted from the gross collections of those colonies for which such information can be obtained :—

Colony.	1891.	1892.	1893.	1894.	1895.	1896.
	£	£	£	£	£	£
New South Wales	2,133,799	2,576,207	2,064,378	2,008,803	1,974,827	1,367,431
Victoria	2,384,418	2,142,376	1,730,947	1,781,086	1,780,082	1,788,118
Queensland	1,202,840	1,120,054	1,063,562	1,107,149	1,237,848	1,267,288
South Australia	696,780	611,723	572,528	525,297	516,195	574,812
Western Australia	233,777	271,376	259,267	409,886	614,457	998,909
Tasmania	378,951	318,306	288,546	281,864	303,762	328,918
New Zealand	1,555,323	1,654,064	1,665,683	1,572,467	1,619,970	1,765,073
Australasia	8,585,888	8,694,106	7,644,911	7,686,552	8,047,141	8,090,549

The revenue from import duties per head of population offers probably more food for reflection than the figures in the table just given. New South Wales raised the smallest revenue compared with population of any of the colonies of the group until 1891, a circumstance due to the comparatively low rate of the tariff; in 1892 its collections were about the average for Australasia, but at the beginning of 1896 a new tariff came into force which was designed to make the ports of the colony free to all imports except narcotics and stimulants, and the revenue per head of population is now very considerably less than in any of the other colonies. The variations in the rates from year to year are interesting

as illustrating the force of the remarks made a few pages back in introducing the subject of Customs duties:—

Colony.	1891.	1892.	1893.	1894.	1895.	1896.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
New South Wales	1 17 3	2 3 7	1 14 1	1 12 6	1 11 3	1 1 3
Victoria	2 1 7	1 16 10	1 9 7	1 10 3	1 10 2	1 10 4
Queensland	2 19 11	2 13 10	2 9 10	2 10 6	2 14 8	2 14 4
South Australia	2 3 11	1 16 11	1 13 6	1 10 1	1 9 1	1 12 0
Western Australia	4 10 7	4 16 11	4 3 10	5 11 5	6 14 1	8 7 1
Tasmania	2 10 11	2 1 8	1 17 6	1 16 2	1 18 2	2 0 3
New Zealand	2 9 4	2 11 6	2 10 4	2 6 4	2 6 10	2 10 0
Australasia	2 4 8	2 4 1	1 18 0	1 17 5	1 18 4	1 17 10

A general statement of the Customs duties levied in each colony would be of value, but there is so little agreement in the tariffs of the colonies that it is not possible to arrange the duties under general heads so as to convey a distinct impression of the scope of each. Indeed, it is more than probable that the keenest analysis would fail to detect any scientific principle underlying the rates of duty charged. Specific duties on large items of general consumption were the first sources of revenue; these have been increased from time to time, but have rarely been diminished when once imposed. The necessities of the Treasury or other causes subsequently led to the imposition of *ad valorem* duties. The only canon of taxation which seems to have weighed with the framers of the tariffs was that raw material required for local manufactures should remain untaxed, and even this obvious rule has not infrequently been departed from. There seems, however, to be a general tendency to reduce import duties. The latest Victorian Customs Tariff has made important alterations in this direction; and the present tariff of New South Wales, as mentioned above, is the freest ever introduced into Australasia.

Trade in 1897.

Below will be found a statement showing the trade of each of the seven colonies during the year 1897:—

Colony.	Total Trade.	Imports.	Exports.	Domestic Exports.
	£	£	£	£
New South Wales	45,495,422	21,744,350	23,751,072	17,057,543
Victoria	32,194,152	15,454,482	16,739,670	12,829,394
Queensland	14,520,748	5,429,191	9,091,557	8,831,450
South Australia	14,347,836	7,277,086	7,070,750	2,625,172
Western Australia	10,358,663	6,418,565	3,940,098	3,218,569
Tasmania	3,112,069	1,367,608	1,744,461	1,721,959
New Zealand	18,072,216	8,055,223	10,016,993	9,596,267
Australasia	138,101,106	65,746,505	72,354,601	55,880,354

The value per head of population was as follows:—

Colony.	Total Trade.	Imports.	Exports.	Domestic Exports.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
New South Wales	34 14 4	16 11 10	18 2 6	13 0 4
Victoria	27 7 9	13 2 11	14 4 10	11 1 8
Queensland	30 7 3	11 7 0	19 0 3	18 9 2
South Australia	39 13 6	20 2 5	19 11 1	7 5 2
Western Australia	69 1 9	42 16 2	26 5 7	21 9 4
Tasmania	18 8 6	8 1 11	10 6 7	10 3 11
New Zealand	25 0 11	11 3 3	13 17 8	13 6 0
Australasia	31 12 7	15 1 2	16 11 5	12 15 11

The detailed returns for the year 1897 are not yet available for all the colonies, and an analysis of the figures for that year cannot, therefore, be made.

RAILWAYS.

TO the proper development of a country like Australasia, ill-supplied with navigable rivers, railway construction is absolutely essential. This has been recognised from an early period, and for the last forty years the Governments of the principal colonies have been fully alive to the importance of carrying on the work. For a long time, however, they were hampered in their efforts by the difficulty of borrowing money in London at a reasonable rate of interest; but since the year 1871 considerable progress has been made in the work of construction; indeed, by far the greater portion of the public debt of Australasia has been contracted for railway purposes. As the area of the seven colonies almost equals that of Europe or the United States of America, while the population numbers less than four and a half millions, it is almost needless to say that many of the lines run through districts very sparsely peopled. This is particularly the case in the colonies of Queensland, South Australia, and Western Australia, where there are vast tracts of territory in which little in the nature of permanent settlement has yet been accomplished, and in none of the colonies can it be said that the railway lines traverse thickly-settled areas. Indeed, if a fault may be found with the State policy pursued in the past, it is that in some cases expensive lines have been laid down in empty country the requirements of which could have been effectually met for many years to come by light and cheap lines, and that in consequence the railway administrators find themselves heavily burdened with a number of unprofitable lines. A few of these have been closed, but the vast majority are worked at a loss. Notwithstanding these drawbacks, however, the railways of Australasia collectively yield a net return equal to 3·27 per cent. on the cost of construction.

History of Railway Construction.

An agitation for the introduction of the railway into the colony of New South Wales was afoot as early as 1846, and in August of that year it was decided at a public meeting held in Sydney to survey a line to connect the capital with Goulburn. But no decided step was taken towards construction until September, 1848, when the Sydney Railroad and Tramway Company was formed for the purpose of laying down a line between Sydney and Parramatta and Liverpool, to be afterwards extended to Bathurst and to Goulburn. The first sod was turned by the Hon. Mrs. Keith Stewart, daughter of Sir Charles Fitzroy, the Governor of the colony, on the 3rd July, 1850. Although started during

a period of trade depression, when there was an abundant supply of labour, the scheme was only well under weigh when the discovery of gold caused a stampede from the city, and the company was left without workmen to carry on the undertaking. Undeterred, however, by the difficulties into which the changing conditions of the country had plunged the Sydney Railroad and Tramway Company, private enterprise in 1853 essayed the further task of constructing a line between Newcastle and Maitland; but this project proved no more successful than the other, and in the following year the Government were forced to step in and carry out the schemes for which the two companies had been promoted. From that time the work of construction was vigorously pressed forward, and on the 26th September, 1855, the line from Sydney to Parramatta, 14 miles in length, was opened to traffic; and on the 11th April, 1857, Newcastle was connected with East Maitland. The extension to Goulburn of the Sydney line was completed on the 27th May, 1869.

While the Sydney Railroad and Tramway Company were trying to surmount the obstacles that had arisen in their path, the work of railway construction was begun in the neighbouring colony of Victoria, no fewer than three private companies being promoted in 1853 for that purpose. Material assistance in the shape of land grants and guarantee of interest was afforded by the Government; and on the 13th September, 1854, the first completed railway in Australasia, a line extending from Flinders-street, Melbourne, to Port Melbourne, was opened to traffic. It had been begun nearly three years after the line to connect Sydney with Parramatta, but was only $2\frac{1}{2}$ miles long. No further mileage was brought into operation until May 13, 1857, when the Melbourne and Hobson's Bay Railway Company, who had constructed the first line, effected communication with St. Kilda; and on the 17th June of the same year a line from Williamstown to Geelong, 39 miles in length, which had been built by another company, was declared open. Meanwhile the Government of the colony had not remained inactive. In addition to assisting private enterprise with liberal concessions, it had taken over in 1855 an unfinished line started by the third of the companies referred to, and was carrying on the work of construction on its own account. By the year 1863 it had acquired all the lines in the colony with the exception of those owned by the Melbourne and Hobson's Bay Company, which were not purchased until the year 1878.

Although a line from Goolwa to Port Elliot, 6 miles in length, over which the locomotive now passes, was opened on the 18th May, 1854, it was at that time merely a horse tramway; and the first railway in South Australia was a line connecting the city with Port Adelaide, $7\frac{1}{2}$ miles long, which was thrown open to traffic on the 21st April, 1856. The following year saw a railway constructed as far north as Gawler. New Zealand was the next of the Australasian colonies to make the introduction. As the result of an agitation on the part of the settlers of Canterbury, a railway was begun during the year 1863 for the purpose of connecting the city of Christchurch with the port of Lyttelton, and

the first portion was brought into use on the 1st December, 1863. The northern colony of Queensland had enjoyed the privilege of self-government for several years when, early in 1864, a line to connect Ipswich with Grandchester was commenced, and on the 31st July of the same year it was opened. Although the Tasmanian Parliament granted a sum of £5,000 in 1863 for the survey of a line to connect Hobart with Launceston, the first railway in the island was one between Launceston and Deloraine, 45 miles in length, which was opened on the 10th February, 1871, having been commenced three years before. It was built by a private company, to whose capital, however, the Government had subscribed eight-ninths of the total amount of £450,000, on condition that the interest should be a first charge on the net receipts, and on the 3rd August, 1872, the line passed entirely into the ownership of the State. Communication between Hobart and Launceston was effected in 1876 by the completion of a line, connecting the southern city with Evandale Junction, which was constructed by an English company. The last of the seven colonies to introduce the railway was Western Australia, where a line from the port of Geraldton to Northampton was begun during 1874 and opened in 1878; while on the 1st October, 1889, a line from Palmerston to Pine Creek, in the Northern Territory, which had been built by the South Australian Government, was opened, the length being 145½ miles.

The progress of railway construction, except, perhaps, in the colony of Victoria, was anything but rapid during the earlier years. This was in a great measure owing to the sparseness of the population and the natural fear that the return would not justify the expenditure which would have to be incurred in making wide extensions of the lines. It was also due, as previously pointed out, to the low estimation in which Australasian securities were held in London, and the consequent high rate of interest at which money for railway construction had to be borrowed. Since the year 1871, however, all the colonies have made satisfactory progress. In the following table will be found the length of line opened during each year, and the total mileage at the close of the working year :—

Year.	Miles opened.		Year.	Miles opened.	
	Total.	During each year.		Total.	During each year.
1854	2½	2½	1864	474	74
1855	16½	14	1865	495	21
1856	32½	16	1866	524	29
1857	117	84½	1867	718	194
1858	132	15	1868	789	71
1859	171	39	1869	918	129
1860	215	44	1870	1,040	122
1861	243	28	1871	1,135	95
1862	373	130	1872	1,273	138
1863	400	27	1873	1,498	225

Year.	Miles opened.		Year.	Miles opened.	
	Total.	During each year.		Total.	During each year.
1874	1,700	202	1886	8,669	788
1875	2,144	444	1887	9,498	829
1876	2,679	535	1888	10,230	732
1877	3,447	768	1889	11,074	844
1878	3,976	529	1890	11,713	639
1879	4,393	417	1891	12,174	461
1880	4,933	540	1892	12,405	231
1881	5,526	593	1893	12,796	391
1882	6,169	643	1894	13,142	346
1883	6,587	418	1895	13,790	648
1884	7,425	838	1896	13,831	41
1885	7,881	456	1897	14,269	438

It will be seen from the above table that the lines opened in Australasia averaged 30 miles in length during each year from 1854 to 1861; from 1862 to 1871 the annual average was 89 miles; from 1872 to 1881, 439 miles; from 1882 to 1891, 665 miles; and from 1892 to 1897, 349 miles. It is now the established policy of each colony to keep the railways under State control, and only in exceptional circumstances is that policy departed from. Excluding coal and other lines which are not open to general traffic, there are in Australasia only 718 miles of private lines, or but 5·03 per cent. of the total mileage open. In Victoria and Queensland the railways are entirely in the hands of the Government; while in Western Australia there are 391 miles of private lines, or 28·72 per cent. of the total mileage of the colony; in New Zealand, 167 miles; in New South Wales, 85 miles; in Tasmania, 55 miles, of which 7 (the Dundas-Zeehan line) are worked by the State; and in South Australia, 20 miles.

The divergence of the policy of Western Australia from that pursued by the other colonies was caused by the inability of the Government to construct lines when the extension of the railway was urgently required in the interests of settlement. Private enterprise was therefore encouraged by liberal grants of land to undertake the work of construction; but the changing conditions of the colony has modified the State policy, and on the 1st January, 1897, the Government acquired the Great Southern Railway, 243 miles in length, one of the two trunk lines in private hands. This railway, which was owned by the West Australian Land Company, Limited, was built on the land-grant system, the State concession being 12,000 acres for every mile of line laid down, of which the original consessionaire retained 2,000 acres. The total price paid by the Government for the railway, with all the interests of the Company and the original concessionaire, was £1,100,000, of which £800,000 is set down as the capital sum on which the railway authorities are expected to provide interest, exclusive of the amount invested in rolling stock.

The other trunk line is the Midland Railway, 277 miles in lengthe owned by the Midland Railway Company of Western Australia, Limited. In this case the land granted by the State was also 12,000 acres per mile of line. In 1891 the Government granted some slight assistance to the Company, and in the following year guaranteed £500,000 of 4 per cent. debentures, the security being a first charge upon the railway and its equipment, and 2,400,000 acres selected land. At three months' notice, the State may foreclose should the Company be indebted to it to the amount of £20,000.

The following statement shows the gauge and length of the private railways of Australasia :—

Line.	Gauge.	Length.
	ft. in.	miles.
New South Wales—		
Deniliquin-Moama	5 3	45
Cockburn-Broken Hill	3 6	36
Clyde-Rosehill	4 8½	3
Warwick Farm	4 8½	1
South Australia—		
Glenelg Railway Co.'s lines :		
Holdfast Bay	5 3	7
Victoria Square	5 3	7
Sidings, loops, &c.	5 3	6
Western Australia—		
Midland : Midland Junction-Walkaway Junction	3 6	277
Canning Jarrah Timber Co.'s Railway	3 6	20
Jarrahdale Timber Co.'s Railway	3 6	27
Waigerup Railway	3 6	14
Quindalup Railway	3 6	12
Karridale Railway	3 6	8
Torbay Timber Co.'s Railway	3 6	33
Tasmania—		
Emu Bay-Waratah	3 6	48
Dundas-Zeehan	3 6	7
New Zealand—		
Wellington-Manawatu	3 6	84
Kaitangata-Stirling	3 6	4
Midland Railway	3 6	79

A proviso has been inserted in the charters of the companies owning the private lines in New South Wales, whereby after a certain date the Government can, if disposed, acquire the lines at a valuation. Similar conditions are found in most of the charters granted by the other colonies permitting the construction of private lines.

In the construction of railways during the last working year the colony of Western Australia displayed most activity, in consequence of the urgent need of laying down lines to the goldfields. Of the 438 miles thrown open to traffic in Australasia during the twelve months, 201 miles were opened in Western Australia, 139 being built by the

Government and 62 by private companies. The most important addition to the system of the colony was the line from Southern Cross to Kalgoorlie, 138 miles in length. This line was opened to traffic as far as Boorabbin, 60 miles, on the 1st July, 1896; and the extension to Kalgoorlie, a further distance of 78 miles, was thrown open on the 1st January, 1897. From Kalgoorlie the railway has now been taken north to Menzies. The most important line under construction at the end of the last working year was the Cue Railway, connecting Cue with Mullewa, a distance of 196½ miles, which has now been opened. A further extension of this line is in course of construction.

In New South Wales the 108 miles opened during the twelve months comprised the Jerilderie-Berrigan line, 22 miles in length; the Parkes-Bogan Gate line, 23 miles; and the Narrabri-Moree line, 63 miles. These are all light "pioneer" lines, capable of carrying ordinary rolling stock, hauled by a light engine, at 15 to 20 miles an hour. The railways of this class have averaged only £2,019 per mile; and it is intended to extend them to other districts where the country is level and the expected traffic does not warrant the construction of properly-equipped lines. The only other colony whose railway mileage was considerably increased in the course of the year ended June, 1897, was Queensland, where 116½ miles were opened to traffic, the principal lines being the Charleville-Wyandra, 61 miles; and Iveragh-Gladstone, 26½ miles. Two short lines—Colton-Pialba, 16½ miles; and Hendon-Allora, 3½ miles—were constructed under the Railway Guarantee Act of 1895, by which the local authority, representing the ratepayers of a district, agrees to pay up to one-half of the deficiency in working expenses and interest during the first fourteen years after opening, collected by means of a rate not exceeding 3d. in the £ of value of ratable lands. Should the operations of any year provide a surplus, half of this is retained by the Government, and the other half paid to the local authority, for distribution amongst the ratepayers, in return for the payments made on account of the deficiency in previous years. Where the line has been payable for three years, the Government may cancel the agreement.

The following table shows the extension of the railway in each colony since 1861:—

Colony.	1861.	1866.	1871.	1876.	1881.	1886.	1891-2.	1896-7.
New South Wales	73	143	358	554	1,040	1,941	2,266	2,724
Victoria	114	275	276	718	1,247	1,754	2,903	3,129
Queensland	*	50	218	298	800	1,433	2,320	2,506
South Australia	56	56	133	308	845	1,226	1,823	1,889
Western Australia	*	*	*	38	92	202	657	1,361
Tasmania	*	*	45	45	168	303	425	475
New Zealand	*	*	105	718	1,334	1,810	2,011	2,185
Australasia	243	524	1,135	2,679	5,526	8,669	12,405	14,269

* Railways not in existence.

In 1883 a junction was effected between the New South Wales and Victorian lines at the river Murray ; three years later direct communication was established between Victoria and South Australia ; and in 1888 the last mile of line connecting Sydney with the northern colony of Queensland was completed, thus placing the four capitals, Brisbane, Sydney, Melbourne, and Adelaide, in direct communication with each other. A few years ago proposals were made to the Government of Western Australia to construct a railway upon the land-grant system, connecting the eastern districts of the colony with South Australia. It was proposed to extend the lines to Eucla, close to the South Australian border, and when that colony had extended its railways to the same point, Perth would be connected with all the capitals of the Australian colonies. In June, 1897, the South Australian Railways Commissioner, in a report to the Commissioner of Public Works, estimated the cost of construction and equipment of a line to the Western Australian border, a distance of 553 miles, at £1,903,000. When the railways of the two colonies shall have been connected, as they will possibly be at no far distant date, the European mails will, in all likelihood, be landed at Fremantle, and sent overland to all parts of the continent.

The following table shows the length of Government railways in course of construction and authorised on the 30th June, 1897 :—

	Miles.		Miles.
New South Wales.....	95	Tasmania	35½
Victoria	9	New Zealand.....	124
Queensland.....	87½		
Western Australia.....	432	Total.....	783

Notwithstanding the energetic expansion of the railway systems throughout Australasia since 1871, there is still room for considerable extension. In the colony of South Australia construction is entirely confined to the south-eastern corner and to the extension of the Northern Line, which has its present terminus at Oodnadatta, 686 miles from Adelaide. It is proposed to eventually extend this line as far north as Pine Creek, the southern terminus of the Port Darwin line. In the course of the year 1896 offers were made on behalf of various syndicates for the construction of the Transcontinental railway, with the acquirement of the section from Palmerston to Pine Creek ; but the Government were not prepared to recommend to Parliament the acceptance of any offer based on the land grant or guarantee system. When this railway is completed direct overland communication will be established between the northern and southern portions of the continent. The length of the gap between the terminus at Oodnadatta and that at Pine Creek is 1,140 miles on the telegraph route.

In New South Wales the railway extensions will be chiefly confined to perfecting the various systems already constructed. At the present time several lines of what is termed the "pioneer" class are in course of construction in level pastoral country. These are of a light and cheap kind

on which the produce of the settlers may be conveyed to the trunk lines at a reasonable speed and at a cheaper rate than carriage by road. In Queensland, with its vast expanse of partly-settled territory and extensive seaboard, the railways are being constructed in separate systems. The lines commence from each of the principal ports and run inland, but there is no doubt that not many years will elapse before these systems will become branches of a main trunk-line which, in all likelihood, will be the Brisbane-Charleville line extended as far as Normanton at the Gulf of Carpentaria. In this colony a system has been introduced by which railways are constructed under a guarantee given by the local authority on behalf of the ratepayers of the district. Details of this system are given on a previous page. In Victoria, Tasmania, and New Zealand the railways are well developed compared with size of territory, and any future extensions will hardly be on so large a scale as in the other colonies. In Western Australia great activity now prevails in extending the lines to the gold-fields, and also in the south-western portion of the colony in the interests of permanent settlement.

Control of State Railways.

The colonies of Victoria, South Australia, New South Wales, and Queensland have found it expedient to place the management and maintenance of railways under the control of Commissioners. Victoria, in 1883, was the first colony to adopt this system; four years later South Australia made the change, while New South Wales and Queensland followed in 1888. Each of these colonies appointed three officials as Commissioners, and conferred upon them large executive powers, amounting to almost independent control, the object aimed at being to obtain economical management of the lines free from political interference. Subsequently Queensland, Victoria, and South Australia reduced the number of Commissioners to one; but in New South Wales, where the administration has been most successful, no changes in the system have been made. The control of the New Zealand railways was also handed over to a body of three Commissioners in 1887; but at the beginning of 1895 the Government resumed charge of the lines, a general manager being responsible to a Minister for Railways.

In New South Wales and Victoria an additional safeguard in railway construction prevails. All proposals for new lines are submitted to a committee selected from Members of the Houses of Parliament. These committees take evidence regarding the suitability of the route proposed, the probable cost of construction, the financial prospects of the line, and the grades to be adopted; and thereupon advise Parliament to adopt or reject the schemes proposed. This supervision of railway development may be said to have been attended with success, although lines that are not likely to be commercially successful have been recommended by the committee and sanctioned by Parliament.

Diversity of Gauge.

Unfortunately for intercolonial communication, railway construction in Australia has proceeded without uniformity of gauge, and the accomplishment of this work, which it is everywhere admitted must be secured, becomes more formidable to contemplate as the years roll on. In 1846 Mr. Gladstone advised that the 4-ft. 8½-in. gauge should be adopted for any lines constructed in New South Wales; and two years later this gauge was adopted as the standard by the Royal Commission appointed for the purpose of determining a uniform gauge for England and Scotland. In 1850, however, the Sydney Railroad and Tramway Company decided to adopt the 5-ft. 3-in. gauge, and in 1852 an Act was passed which provided that all railways in the colony should be laid down to that gauge. But in 1853 the company mentioned, having changed their engineer, altered their views on the gauge question, and applied to have the 4-ft. 8½-in. gauge substituted for the 5-ft. 3-in., succeeding in repealing the Act and in passing another which made the narrower gauge imperative. This step was taken without the concurrence of the other colonies, and feeling ran very high in Victoria in consequence, as two of the railway companies in that colony had already given large orders for rolling-stock on the 5-ft. 3-in. gauge. Until the lines of the two colonies met on the boundary no discomfort was, of course, experienced; but since then the break of gauge, with the consequent change of trains, has been a source of irritation and inconvenience. The South Australian Government adopted at the outset the 5-ft. 3-in. gauge of Victoria; but finding that the construction of lines of this gauge involved a heavier expense than they were prepared to face, the more recent lines were built on a gauge of 3 ft. 6 in. In that colony there are 514½ miles laid to the 5-ft. 3-in. gauge, and 1,229½ to that of 3-ft. 6-in., which is also the gauge of the 145 miles of railway in the Northern Territory. The line joining Adelaide with the Victorian border, as well as several of the other trunk-lines, has been constructed on the wide gauge, so that the line from Melbourne to Adelaide is uniform. The private line which prolongs the South Australian system into New South Wales as far as Broken Hill is on the 3-ft. 6-in. gauge. All the Queensland lines are built on the gauge of 3 ft. 6 in., so that transhipment is necessary on the boundary between that colony and New South Wales. Tasmania, Western Australia, and New Zealand have adopted the 3-ft. 6-in gauge. The first line laid down in Tasmania was on the 5-ft. 3-in. gauge, but it was soon altered to 3 ft. 6 in. On the west coast of that island an experiment is being made in the construction of a 2-ft. gauge line, at one-fourth the cost of a line laid down to the Tasmanian standard gauge. The advisability of constructing lines of this class is also being considered in Victoria. The total length of line in Australasia laid down to a gauge of 5 ft. 3 in. is 3,688 miles; there are 2,643 miles on the 4-ft. 8½-in. gauge, and 7,938 miles on the 3-ft. 6-in. gauge.

As far back as May, 1889, Mr. Eddy urged the Government of New South Wales to take action with the object of securing a uniform gauge for the colonies, and frequently since that date the Railway Commissioners have directed attention to the urgency of dealing with this important question before the colonies incur greater expenditure in railway construction. They have suggested that the settlement of the difficult question of the adoption of a standard gauge should be approached from the standpoint of which of the two gauges, 4 ft. 8½ in. and 5 ft. 3 in., can be adopted at the least cost and with the smallest amount of inconvenience to the country; and that the whole of the railways of New South Wales and Victoria, with that part of the South Australian lines laid to the 5-ft. 3-in. gauge, as well as the line to Cockburn, and all the lines in Queensland south of Brisbane leading to New South Wales, shall be altered to the standard, the cost of altering the railways and the rolling stock necessary to work them to be a national charge.

Comparison of Railway Facilities.

The population and area of territory per mile of line open vary considerably in the different colonies. In comparison with population, Western Australia, South Australia, and Queensland—the most extensive colonies—have the greatest mileage; but in proportion to the area of territory, Victoria, New Zealand, and Tasmania take the lead. The annexed table shows the relation of the railway mileage to population and to the area of each colony for the year 1896–7 :—

Colony.	Per mile of line open.	
	Population.	Area.
	No.	sq. miles.
New South Wales	477	114
Victoria	374	28
Queensland	192	267
South Australia*	189	478
Western Australia	116	717
Tasmania	350	55
New Zealand	328	48
Australasia	305	216

* Including Northern Territory.

In the following table are given the average population and area of territory per mile of line open in the principal countries of the world.

Of course a comparison can only be made fairly between Australasia and other young countries in process of development :—

Countries.	Length of Railway.	Per Mile of Line Open.	
		Population.	Area.
	miles.	No.	sq. miles
United Kingdom	21,277	1,855	6
France	25,121	1,533	8
Germany	27,392	1,908	8
Austria-Hungary	18,983	2,179	13
Belgium	2,857	2,244	4
Netherlands	1,862	2,610	7
Switzerland	2,233	1,314	7
Sweden	6,058	812	29
Norway	1,071	1,868	116
Russia (exclusive of Finland)	21,948	4,291	86
Spain	7,301	2,495	27
Italy	9,579	3,266	11
India (inclusive of Native States)	20,114	14,280	78
Canada	16,270	312	212
Cape Colony	2,507	727	110
Argentine Republic	8,832	447	201
Brazil	8,086	2,020	397
Chili	1,782	1,663	165
United States of America	182,600	394	16
Australasia	14,269	305	216

Cost of Construction.

At the close of the year 1896–7, the cost of construction and equipment of the State railways completed and open to traffic in Australasia was, in round figures, £130,000,000, or nearly 58 per cent. of the public debts of the colonies, after deducting sinking funds. To what extent the provinces have contributed to this expenditure will be apparent from the table given below, showing the total cost and the average per mile. A comparison of the mileage embodied in the table, with the figures given on previous pages, will disclose certain differences. In the case of Victoria, the tramway from Dookie to Katamatite, 17 miles, has been excluded from the expenditure of that colony, and the total mileage correspondingly reduced ; and in the case of Queensland, the line from Charleville to Wyandra, 61 miles in length, was not officially opened until the 1st July, 1897, and therefore will not appear in the accounts until next year. For Western Australia, the total cost of construction and equipment is given of the average mileage open to traffic during the working year, as the accounts are thus presented in the Annual Report of the Minister for Railways. Consequently, the amount shown only includes seven-twelfths of the price paid by the Government of that colony for the Great Southern Railway, which was

taken over on the 1st December, 1896. Also, the mileage set down is, under these circumstances, not the total open to traffic on the 30th June, 1897, but the average worked during the year :—

Colony.	Year ended	Length of line open.	Gauge.	Total cost of Construction and Equipment.	Average cost per mile.
		miles.	ft. in.	£	£
New South Wales ...	30 June, 1897	2,639½	4 8½	37,369,205	14,157
Victoria	30 ,, ,,	3,112	5 3	38,329,402	12,317
Queensland	30 ,, ,,	2,445	3 6	17,280,569	7,068
South Australia	30 ,, ,,	1,723¾	5 3 / 3 6	12,599,892	7,310
Northern Territory..	30 ,, ,,	145½	3 6	1,155,720	7,943
Western Australia ...	30 ,, ,,	970	3 6	3,734,477	4,499
Tasmania	31 Dec., 1896	419¾	3 6	3,524,051	8,395
New Zealand	31 Mar., 1897	2,018	3 6	15,577,392	7,719
Australasia	.....	13,473½	.....	129,570,708	9,617

It will be seen that the lines which have been constructed most cheaply are those of Western Australia, where the average cost per mile has only been £4,499, as compared with an average of £9,617 for the whole of Australasia. In that colony there have been few engineering difficulties to contend with, and the lines laid down have been of a light kind. In New South Wales, the average cost, given as £14,157, has been somewhat reduced lately, in consequence of the construction of light "Pioneer" lines, built for an expenditure of £2,019 per mile. It is proposed by the Minister for Public Works to construct several new lines by day labour, as the Railway Construction Department has had a somewhat unfortunate experience in regard to claims for extras to contracts, and expensive litigation in resisting such claims. In Victoria the average cost has been reduced from £13,153 to £12,317 since 1891. At that date it was decided to apply the "butty-gang" system to the construction of railways in the colony, and to build all new country lines as cheaply as possible, and this has been strictly adhered to. Fairly substantial permanent way has been laid down, with reduced ballast; unless they have been absolutely necessary, fencing and gatehouses have been dispensed with; and only a skeleton equipment for stations and water supplies has been provided. As settlement progresses and traffic is developed, it is intended to raise these lines to the requisite standard of efficiency. In Queensland construction is now proceeding, in some cases, under a guarantee from the local authorities.

It would hardly be fair to institute a comparison between the cost of construction per mile in Australasia and in the densely-populated countries of Europe, for while in Europe the resumption of valuable ground is perhaps the heaviest expense in connection with the building

of railways, in the colonies this item of expenditure is not of leading importance. The cost per mile in certain sparsely-settled countries is as follows :—

Canada	£11,522
Cape Colony	9,093
United States	12,889
Argentina	10,632
Mexico	9,417
Chili	6,358
Brazil	8,104

while for Australasia it is £9,617.

Revenue and Working Expenses.

The avowed object of State railway construction in Australasia has been to promote settlement, apart from considerations of the profitable working of the lines ; but at the same time the principle has been kept in view that in the main the railways should be self-supporting, and some of the colonies have, with more or less success, handed them over to Commissioners to be worked according to commercial principles, free from political interference. With the exception of South Australia, so far as the Palmerston-Pine Creek line, in the Northern Territory, is concerned, in all the colonies the revenue derived from the railway traffic exceeds the working expenses; but only Western Australia derives a profit from the working of the lines. Even in New South Wales, where the Commissioners have achieved most commendable results during the term of their administration, and claim to have at last made the lines self-supporting, there is still a deficiency when it is borne in mind that the average price received for the loans of the colony is but £96·28 per £100 of stock, and the interest payable is calculated accordingly. The net sum available to meet interest charges during the last two working years will be found in the following table, showing the earnings and working expenses :—

Colony.	Working year, 1895–6.			Working year, 1896–7.		
	Gross Earnings.	Working Expenses.	Net Earnings.	Gross Earnings.	Working Expenses.	Net Earnings.
	£	£	£	£	£	£
New South Wales	2,820,417	1,551,888	1,268,529	3,014,742	1,601,218	1,413,524
Victoria	2,401,392	1,546,475	854,917	2,615,935	1,563,805	1,052,130
Queensland	1,085,494	644,362	441,132	1,179,273	684,146	495,127
South Australia	986,500	583,022	403,478	1,025,035	614,254	410,781
Northern Territory	15,105	15,289	(—) 184	17,908	18,966	(—) 1,058
Western Australia	529,616	263,705	265,911	915,483	577,655	337,828
Tasmania*	149,642	120,351	29,291	162,932	122,171	40,761
New Zealand†	1,183,041	751,368	431,673	1,286,158	789,054	497,104
Australasia	9,171,207	5,476,460	3,694,747	10,217,466	5,971,269	4,246,197

* Years ended 31st December, 1895 and 1896. † Years ended 31st March, 1896 and 1897.
(—) Denotes deficiency in amount available to meet working expenses.

In the first of the years shown in the table there was a severe drought in the four great colonies of Australia, causing a heavy fall in the earnings from traffic in wool and agricultural produce. As compared with the year 1894–5, the net revenue was thereby lessened in New South Wales, Victoria, and Queensland; but in South Australia the loss mentioned was more than counterbalanced by an expansion in other traffic. In the other three colonies the financial results were improved—to a remarkable extent, indeed, in Western Australia; and a glance at the figures given in the table will show that during the following year 1896–7 all the colonies participated in the general improvement in the traffic returns—always excepting, of course, the line in the Northern Territory.

Dealing first with New South Wales, the reduction in the gross earnings during the twelve months ended June, 1896, as compared with the previous year, amounted to £57,787—due, as before explained, to a decrease in the traffic in pastoral and agricultural produce, in consequence of the drought, and also, it may be said, to the strike of coal-miners at Newcastle, which lasted nearly three months. The decrease in the amount of the gross earnings would have been greater than the sum stated had it not been for an expansion in the coaching traffic to the extent of £20,069. Floods in the Bourke district led to a considerable expenditure on repairs; but, in spite of this fact, the liberal expenditure during previous years and the lower prices of materials enabled a large reduction to be effected in the permanent way expenses, and the working expenditure was, therefore, reduced by £15,701, leaving the net revenue £42,086 less than in 1894–5. This, however, was but a temporary check, and in the following year the Commissioners obtained the best results which have yet attended their successful administration of the lines of the colony. The gross earnings amounted to £3,014,742, being an increase on those of the previous year of £194,325, to which both coaching and goods traffic contributed; and after providing for an increased working expenditure, chiefly caused by debiting this account with a greater amount of new stock, and effecting more extensive repairs, the net earnings were left at £1,413,524, being much in excess of any sum before received. In connection with the New South Wales lines, it is the opinion of the Commissioners that it will soon be necessary to expend a considerable sum in enlarging the workshops and in providing the necessary machinery for the repair of the large locomotives now in use.

In the neighbouring colony of Victoria the drought told severely on the railway returns for the year 1895–6. The gross earnings were the smallest since 1885–6; the net earnings were the lowest since 1883; the deficiency in providing interest on the capital expenditure was the greatest known. At the end of this year a change was made in the management of the lines; there was a better season in 1896–7, and goods traffic increased; the revenue from passenger traffic was augmented by £54,733; and the total earnings amounted to £2,615,935, as

compared with £2,401,392 in the previous year. Although concessions amounting to £35,000 were made to the employees, and extensive maintenance works and renewals were carried out, the working expenses showed an increase of only £17,330, the net earnings—£1,052,130—being only exceeded during the last eight years in 1892–3 and 1893–4 Unlike New South Wales and Victoria, Queensland had an expansion in passenger and in other goods traffic sufficiently great to more than counteract the loss on account of the bad season in 1895–6, the gross earnings being larger than those of the previous year by £59,982, which, however, was all swallowed up by increased working expenses—partly in repairing considerable damage caused by floods—and the net earnings were £2,407 less than in 1894–5. This fall was more apparent than real, as, but for a change in the system of paying the wages of the employés, the net revenue would have shown an increase. During the twelve months ended June, 1897, the lines of Queensland, with a better season, earned the largest amount of gross and net revenue so far obtained, passenger traffic showing an increase as well as the traffic in wool and agricultural produce.

South Australia was more fortunate in 1895–6 than the other colonies affected by the drought, as an increase in the traffic in other goods compensated for the loss on account of the diminished quantities of wool and agricultural produce carried, and a greater passenger traffic resulted in an addition of £12,296 to the net revenue obtained in 1894–5. In the following year the harvest was a failure, an adverse season being again experienced in the colony; but a great increase in the Barrier traffic and in coaching raised the gross earnings by £38,535. Of this sum, however, £31,232 was absorbed by increased working expenses. This, it is stated, was almost wholly due to the necessity for recouping capital account for expenditure which ought to have been debited to working expenses at an earlier date. In connection with the Palmerston-Pine Creek line, in the Northern Territory, the feature of the working during the last two years was the failure of the revenue to defray working expenses. This was not due to a falling-off in the traffic, for the earnings increased in both years, but to the heavy expenditure necessitated, first, by the ravages of the teredo to the jetty at Palmerston, and, second, by the terrific cyclone which struck Port Darwin in the early part of 1897.

The rush to the gold-fields of Western Australia has brought an enormous amount of traffic to the railways of that colony, and the lines at present stand in a position which it is impossible for those of any other province to attain except under similar circumstances, the earnings, after defraying working expenses, being sufficient to yield a return on invested capital of 11·48 per cent. in 1895–6 and 9·04 per cent. in 1896–7. In great contrast to these lines are those of Tasmania, which, although showing improved earnings and a smaller proportion of working expenses, only returned 1·15 per cent. on the capital expenditure in 1896, and this, too, the highest return so far obtained.

During the last two years the lines of New Zealand have shown a substantial development both in goods and in passenger traffic, and the proportion of working expenses has been reduced. For the year nded 31st March, 1897, the net earnings were the highest obtained during the last eight years.

The proportion of gross earnings absorbed by working expenses during each of the last five years will be found below :—

Colony.	Percentage of Gross Earnings absorbed by Working Expenses.				
	1892-3.	1893-4.	1894-5.	1895-6.	1896-7.
New South Wales	59·39	56·58	54·46	55·02	53·11
Victoria	63·23	59·99	59·78	64·40	59·78
Queensland	62·47	62·61	56·75	59·36	58·01
South Australia	63·56	56·98	59·26	59·10	59·92
Northern Territory	74·90	70·42	77·96	101·22	105·91
Western Australia	86·10*	73·96	61·50	49·79	63·09
Tasmania†	91·32	89·73	85·02	80·42	74·98
New Zealand‡	61·97	62·70	63·62	63·51	61·35
Australasia	62·51	59·96	58·67	59·71	58·44

*Half-year ended June, 1893. † Years ended 31st December, 1892-6. ‡ Years ended 31st March, 1893-7.

It will be seen from this table that the percentage of working expenses for Australasia as a whole has declined from 62·51 to 58·44 in the course of the five years. In Western Australia the decrease amounted to 26·72 per cent. ; in Tasmania, to 17·89 per cent. ; and in New South Wales, to 10·57 per cent. In New Zealand the improvement during the quinqennium was at the rate of only 1 per cent., while in Victoria it was 5·46 per cent. ; in Queensland, 7·14 per cent. ; and in South Australia, 5·73 per cent. Comparing the first with the last year given, the line in the Northern Territory actually showed an increase in working expenditure at the rate of 41·40 per cent. At the present time the proportion of gross earnings absorbed by working expenses is smallest in New South Wales, and, setting aside the Palmerston–Pine Creek railway, highest in Tasmania.

Interest returned on Capital.

In establishing the financial results of the working of the lines, it is the practice of the railway authorities to compare the net returns with the nominal rate of interest payable on the railway loans or on the public debt of the colonies. An accurate comparison, of course, is afforded by taking the average rate of interest payable on the actual price yielded to the State by outstanding loans. This information is not obtainable for New Zealand; but for the other colonies it is to be understood that the figures in the second column of the following table, showing the interest on outstanding loans, represent the actual rate payable by the State when the prices at which the stocks were sold are taken into consideration. On this basis, the only colony whose lines pay their way is Western Australia, where the activity in gold-mining has resulted in a net profit of 5·43 per cent. on the railway lines of the colony after defraying the actual interest charge on the capital expenditure. Even in New South Wales, where the Commissioners have announced a profit after paying interest on the invested capital, there is still a deficiency of 0·07 per cent., but it may be expected that this will be extinguished at an early date :—

Colony.	Interest returned on Capital.	Actual rate of Interest payable on outstanding Loans.	Average Loss.
	per cent.	per cent.	per cent.
New South Wales	3·78	3·85	0·07
Victoria	2·74	4·00	1·26
Queensland	2·86	4·09	1·23
South Australia	3·26	4·19	0·93
Northern Territory ...	(—) 0·08	3·94	4·02
Western Australia.....	9·04	3·61	*5·43
Tasmania.....	1·15	3·87	2·72
New Zealand	3·19	3·92	0·73
Australasia	3·27	3·96	0·69

* Average gain.

The rate of return on capital which is shown in the foregoing table represents the interest on the gross cost of the lines. In some cases the nominal amount of outstanding debentures is less than the actual expenditure on construction and equipment, owing to the fact that some loans have been redeemed; but as the redemption has been effected by means of fresh loans charged to general services, or by payments from the general revenue, and not out of railway earnings, no allowance on this account can reasonably be made.

The table given below shows the rate of interest returned on the capital expenditure for each of the last five years, with the deficiency in meeting the actual rate of interest payable on outstanding loans. In the case of New Zealand, only the nominal loss is shown; the actual loss was somewhat higher :—

Colony.	1892-3.	1893-4.	1894-5.	1895-6.	1896-7.
	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
Interest returned on Capital Expenditure.					
New South Wales	3·48	3·46	3·60	3·44	3·78
Victoria	2·87	2·89	2·74	2·24	2·74
Queensland	2·37	2·18	2·68	2·63	2·86
South Australia	3·07	3·54	3·12	3·21	3·26
Northern Territory	0·34	0·42	0·28	(—)0·02	(—)0·08
Western Australia	†0·79	3·12	5·44	11·48	9·04
Tasmania*	0·43	0·44	0·61	0·83	1·15
New Zealand	3·05	2·88	2·73	2·80	3·19
Net Loss in Working Lines.					
New South Wales	0·48	0·51	0·35	0·46	0·07
Victoria	1·15	1·15	1·28	1·84	1·26
Queensland	1·81	1·99	1·49	1·46	1·23
South Australia	1·21	0·73	1·20	1·01	0·93
Northern Territory	3·60	3·52	3·64	3·96	4·02
Western Australia	†3·37	0·99	‡1·46	‡7·66	‡5·43
Tasmania*	3·66	3·67	3·35	3·05	2·72
New Zealand	1·37	1·54	1·37	1·14	0·73

* Years 1892 to 1896. † Six months ended June, 1893. ‡ Net profit.

In 1881 the New South Wales railways yielded 5·31 per cent.—a higher rate of interest on the capital cost than was ever reached before or since. In the same year the Victorian lines yielded a return of 4·04 per cent., which is the highest on record in that colony, with the exception of 4·18 in the year 1886. The decline in the net profits was largely due to the extension of the lines in sparsely-populated districts; but with the adoption of a more prudent policy in the matter of construction, largely dictated by the severe financial pressure to which the colonies were subjected, and with more careful working, the returns, as will be evident from the foregoing table, are again showing improvement.

Earnings and Expenses per Mile.

The gross earnings, expenditure, and net earnings per average mile worked during the last two years were as follow :—

Colony.	Gross Earnings.		Expenditure.		Net Earnings.	
	1895-6.	1896-7.	1895-6.	1896-7.	1895-6.	1896-7.
	£	£	£	£	£	£
New South Wales..	1,114	1,171	613	622	501	549
Victoria	769	837	496	500	273	337
Queensland	455	486	270	282	185	204
South Australia ...	573	595	339	356	234	239
Northern Territory	104	123	105	130	(—) 1	(—) 7
Western Australia.	913	1,103	455	696	458	407
Tasmania*	350	381	281	286	69	95
New Zealand	592	638	376	391	216	247
Australasia...	710	770	424	450	286	320

* 1895 and 1896.

For the whole of Australasia the gross earnings per average mile worked during 1896–7 were £60 more than in the previous year, and the working expenses were increased by £26, leaving the net earnings at £320 in 1896–7, as compared with £286 for 1895–6. In the two previous years the net earnings stood at £293 per mile. Below will be found a table giving the returns per train mile. In all the colonies, with the exception of the Northern Territory, there was an increase in the train mileage run during 1896–7. The increase in Western Australia was nearly a million miles :—

Colony.	Gross Earnings.		Expenditure.		Net Earnings.	
	1895-6.	1896-7.	1895-6.	1896-7.	1895-6.	1896-7.
	d.	d.	d.	d.	d.	d.
New South Wales..	87·69	88·99	48·25	47·27	39·44	41·72
Victoria	64·11	68·03	41·29	40·67	22·82	27·36
Queensland	54·91	57·30	32·59	33·24	22·32	24·06
South Australia ...	68·57	66·95	40·53	40·12	28·04	26·83
Northern Territory	114·28	137·28	115·67	145·38	(–)1·39	(–)8·10
Western Australia.	82·44	86·59	41·05	54·64	41·39	31·95
Tasmania*	49·36	52·85	39·69	39·63	9·67	13·22
New Zealand.....	85·85	90·54	54·53	55·55	31·32	34·99
Australasia ...	72·13	75·01	43·07	43·84	29·06	31·17

* 1895 and 1896.

In some of the colonies the railways pass through heavy and mountainous country, involving steep gradients. This is particularly the case in New South Wales, where the lines are most exceptional in their character, having been constructed with an unusual proportion of steep gradients, the worst being on the trunk-lines, and so situated that the whole of the traffic has to pass over them. In the Southern system the line at Cooma reaches an altitude of 2,659 feet above the sea-level; in the Western, at the Clarence station, Blue Mountains, a height of 3,658 feet is attained; while on the Northern line the highest point, 4,471 feet, is reached at Ben Lomond. In no other colony of the group do the lines attain such an altitude. In Queensland the maximum height is 3,008 feet; in Victoria, 2,452 feet; in South Australia, 2,024 feet; in Western Australia, 1,522 feet; and in New Zealand, 1,252 feet. In the colonies where heavy gradients prevail the working expenditure must necessarily be heavier than in the colonies where the surface configuration is more level.

Financial Results of Foreign Railways.

The interest on capital cost, the proportion of working expenses to the gross revenue, and the returns per train mile for the railways of some of the principal countries of the world are given below. The figures for the countries other than Australasia refer either to the year 1896 or 1895:—

Country.	Capital Cost.			Working Expenses: Proportion to Gross Revenue.	Per Train Mile.		
	Total.	Per Mile Open.	Return Per Cent.		Gross Revenue.	Working Expenses.	Net Revenue.
	£	£	p. cent.	per cent.	d.	d.	d.
United Kingdom	1,029,475,335	48,384	3·88	56·0	61·2	34·1	27·1
France	620,840,000	27,540	3·73	52·9	66·8	36·2	30·6
Germany	559,043,000	20,409	4·98	61·0	73·6	44·3	29·3
Belgium	60,422,956	29,556	4·22	56·2	56·4	33·1	23·3
United States	2,230,584,487	12,331	3·10	70·5	69·3	48·8	20·5
Canada	187,462,062	11,522	1·72	69·3	56·8	39·9	16·9
Cape Colony	21,193,417	9,407	10·18	47·1	98·0	46·2	51·8
Australasia	129,570,708	9,617	3·27	58·4	75·0	43·8	31·2

The figures given above for the Cape Colony are for State lines only, and the return on the invested capital is exclusive of the Orange Free State's share of the profits.

Coaching and Goods Traffic.

The following table shows the number of passengers carried on the lines of the various colonies during the years 1881, 1891–2, and 1896–7. It will be seen that during the last few years the number of

journeys on the Victorian lines has fallen off enormously, although the traffic has again taken an upward movement. Nearly all the colonies, however, experienced the effects of the diminished spending power of the people; but in the majority of cases a recovery has taken place. The number of passenger journeys in Tasmania in 1896 was still very small compared with the 1891 returns:—

Colony.	Passengers carried.		
	1881.	1891-2.	1896-7.
New South Wales	6,907,312	19,918,916	22,672,924
Victoria	18,973,070	69,546,921	42,263,638
Queensland*	247,284	2,370,219	2,633,556
South Australia	3,032,714	5,749,028	5,799,928
Northern Territory	No lines	4,541	3,080
Western Australia	67,144	508,304	3,607,486
Tasmania	102,495	725,724	542,825
New Zealand	2,911,477	3,555,764	4,482,456

* Exclusive of journeys of season ticket-holders.

The amount of goods tonnage is shown in the subjoined table. In the period from 1881 to 1891 there was an increase of about 156 per cent., varying from 71 per cent. in South Australia to 377 per cent. in Queensland. Since the latter year the tonnage has increased by not quite 7 per cent.; but Victoria is the only colony where the goods traffic was smaller in 1896–7 than in 1891–2. The figures are appended:—

Colony.	1881.	1891-2.	1896-7.
	tons.	tons.	tons.
New South Wales	2,033,850	4,296,713	4,567,041
Victoria	1,249,049	3,431,578	2,383,445
Queensland	161,009	768,527	1,243,603
South Australia	646,625	1,106,839	1,146,293
Northern Territory	No lines.	2,633	3,150
Western Australia	27,816	94,476	858,748
Tasmania	44,396	161,141	229,707
New Zealand	523,099	2,122,987	2,368,927
Australasia	4,685,844	11,984,894	12,800,914

The percentage of receipts from coaching traffic to the total receipts is somewhat less in the Australasian colonies than in the United Kingdom, where for the year 1896 the coaching receipts formed 45·9 per

cent. of the total obtained from goods and passenger traffic. The figures for each colony are given below :—

Colony.	Coaching Traffic.	Goods Traffic.
	per cent.	per cent.
New South Wales	36·4	63·6
Victoria	50·8	49·2
Queensland	37·4	62·6
South Australia	30·3	69·7
Northern Territory	30·0	70·0
Western Australia	41·0	59·0
Tasmania	45·5	54·5
New Zealand	38·1	61·9
Australasia	40·5	59·5

Rolling Stock.

The following table gives the different classes of rolling stock in the possession of the several Australasian Governments at the end of the year 1896–7, and, considerable as are the numbers of each class, they could with advantage be largely increased in most of the colonies :—

Colony.	Engines.	Coaching Stock.	Goods Stock.
New South Wales	502	1,026	9,455
Victoria	517	1,490	8,631
Queensland	287	465	4,310
South Australia	320	369	6,219
Northern Territory	6	7	134
Western Australia	151	224	3,485
Tasmania	61	213	997
New Zealand	269	714	8,503
Australasia	2,113	4,508	41,734

In Victoria the stock of powerful engines requires augmenting without delay ; and at the close of the working year, 355 waggons were under construction. Queensland has a large number of rolling stock under order, as have also New Zealand and Western Australia.

Railway Accidents.

The persons meeting with accidents on railway lines may be grouped under three heads—passengers, servants of the railways, and trespassers ; and the accidents themselves might be classified into those arising from causes beyond the control of the person injured, and those due to

misconduct or want of caution. The following table shows the number of persons killed and injured on the Government railways during 1896–7 in those colonies for which returns are available :—

Colony.	Passengers.		Railway Employés.		Trespassers, &c.		Total.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
New South Wales	2	50	8	78	15	7	25	135
Victoria	1	137	6	295	28	86	35	518
South Australia	2	4	4	18	3	1	9	23
Northern Territory*	...	.....	...	.....	...	.....	...	.....
New Zealand	4	11	2	158	2	74	8	243

* No accidents.

The railways of Australasia have been as free from accidents of a serious character as the lines of most other countries. In order to obtain a common basis of comparison it is usual to find the proportion which the number of persons killed or injured bears to the total passengers carried. There is, however, no necessary connection between the two, for it is obvious that accidents may occur on lines chiefly devoted to goods traffic, and a more reasonable basis would be the accidents to passengers only compared with the number of passengers carried. The data from which such a comparison could be made are wanting for some countries. As far as the figures can be given they are shown in the following table, which exhibits the number of passengers killed and injured per million carried. The figures are calculated over a series of years and brought down to the latest available dates :—

Country.	Number of Years.	Number of Passengers.		Average per million passengers carried.	
		Killed.	Injured.	Killed.	Injured.
Germany.....	5	250	980	0·10	0·40
Austria-Hungary.	3	46	435	0·13	1·26
Belgium	5	72	589	0·16	1·27
Sweden	4	6	10	0·10	0·17
France.....	5	397	2,019	0·26	1·30
Norway	4	1	1	0·04	0·04
Holland	5	8	33	0·07	0·28
Switzerland	6	142	475	0·61	2·04
Russia	6	177	591	0·74	2·46
United Kingdom.	4	398	5,084	0·11	1·38
Spain	6	96	533	0·56	3·12
Canada	4	43	230	0·76	4·04
New South Wales	10½	81	515	0·40	2·32
Victoria	10	36	1,196	0·07	2·45

State Railways of Australasia, 1897–8.

The financial results obtained from the administration of the State lines of the colonies during the last financial year are shown in the following table. An analysis of the figures cannot yet be made :—

Colony.	Year ended—	Cost of Construction and Equipment.	Gross Earnings.	Working Expenses.	Net Earnings.	Interest returned on Capital.
		£	£	£	£	per cent.
New South Wales	30 June, 1898..	37,719,402	3,026,748	1,614,605	1,412,143	3·75
Victoria	30 ,, 1898..	38,602,304	2,608,896	1,646,054	962,842	2·49
Queensland	30 ,, 1898..	18,056,285	1,215,811	686,066	529,745	2·93
South Australia	30 ,, 1898..	12,764,106	984,228	603,474	380,754	2·98
Northern Territory	30 ,, 1898..	1,155,172	14,124	20,268	(—) 6,144	Nil.
Western Australia	30 ,, 1898..	5,047,261	1,019,677	786,318	233,359	4·62
Tasmania	31 Dec., 1897..	3,572,091	166,833	128,544	38,289	1·07
New Zealand	31 Mar., 1898..	15,993,903	1,376,008	857,191	518,817	3·24
Australasia	.....	132,910,524	10,412,325	6,342,520	4,069,805	3·07

Note.—(—) minus = deficiency in earnings to meet working expenses.

Tramways.

In all the Australasian colonies tramways are in operation, but it is chiefly in Sydney and Melbourne, the inhabitants of which numbered at the latest date 417,250 and 458,610 respectively, that the density of settlement has necessitated the general adoption of this mode of transit. In New South Wales steam-motors are mostly used, though there are 2 miles of cable tram and 3½ miles of electric tram at North Sydney, and another cable-line, 2½ miles in length, from King-street, Sydney, to Ocean-street, in the suburb of Woollahra. The length of Government tram-lines open on the 30th June, 1897, was 62½ miles, which had cost for construction the sum of £1,452,670. The receipts for the year ended on the same date were £306,695, and the working expenses £248,881, leaving a profit of £57,814, or 3·98 per cent. on the invested capital.

In Victoria the cable system is in operation in the metropolitan area, the lines having been constructed by a municipal trust at a cost of £1,705,794. The tramways are leased to a company, and the receipts for the year ended 31st December, 1897, were £365,981. The number of passengers carried during the year was 36,231,106. In addition to these cable lines, 48 miles in length, there are 5 miles of steam and 4 miles of electric tramway in Victoria. There is no record of the length of horse tramways in the colony.

In Queensland there is a system of horse trams, controlled by a private company, which is now being converted into an electric system. No information regarding liabilities is available, but the assets on the 30th

September, 1896, were set down at £131,182. The receipts for the year ended 30th September, 1897, were £30,299, and the expenses, including depreciation, £26,304. The company owned 33 electric and 24 horse cars, and 70 horses. The length of the tramways is 15 miles, or 25 miles of single line.

In South Australia there are no Government tramways, but horse trams are run in the principal streets of Adelaide by private companies. No particulars have been collected respecting the length of these lines, nor of the returns therefrom.

The Western Australian Government owns a line of horse tramway on a 2-ft. gauge between Roeburne and Cossack, a length of 8½ miles, constructed at a cost of £21,767. For the year ended 30th June, 1897, the gross earnings were £3,686, and the working expenses £2,491, leaving the net receipts at £1,195, equal to 5·49 per cent. on the capital cost.

In Tasmania there is an electric tramway, about 9 miles in length, owned by a private company. The cost of construction and equipment was £90,000; the average number of hands employed is 65; and the company possesses 20 cars, of which the average number in use is 12. For the year ended 31st December, 1896, the receipts amounted to £12,052, and the working expenses, excluding directors' fees, to £8,511. The passengers carried during the twelve months numbered 1,219,273.

There are also tramways in existence in New Zealand under private management, but no particulars in regard to them are at present available.

POSTS AND TELEGRAPHS.

THE first Australasian post-office was established by Governor Macquarie in the year 1810, Mr. Isaac Nichols being appointed Postmaster. The office was in High-street (now known as George-street), Sydney, at the residence of Mr. Nichols, who was, "in consideration of the trouble and expense attendant upon this duty," allowed to charge on delivery to the addressee 8d. for every English or foreign letter of whatever weight, and for every parcel weighing not more than 20 lb., 1s. 6d., and exceeding that weight, 3s. The charge on Colonial letters was 4d., irrespective of weight; and soldiers' letters, or those addressed to their wives, were charged 1d. Very little improvement in regard to postal matters took place for some years.

In 1825 an Act was passed by Sir Thomas Brisbane, with the advice of the Council, "to regulate the postage of letters in New South Wales," giving power for the establishment of post-offices, and to fix the rates of postage. It was not, however, until 1828 that the provisions of the Act were put into full force. The rates of postage appear to have depended upon the distance and the difficulty of transmission. The lowest single inland rate was 3d., and the highest 12d., the postage on a letter increasing according to its weight, which was fixed for a single letter at $\frac{1}{4}$-ounce. Letters between New South Wales and Van Diemen's Land were charged 3d. each (ship rate), and newspapers 1d. Other ship letters were charged 4d. single rate, and 6d. for any weight in excess. The privilege of franking was allowed to the Governor and a number of the chief public officials, and letters to and from convicts passed free under certain regulations.

In 1831 a twopenny post was established in Sydney; and in 1835, under Sir Richard Bourke, the Act of 1825 was repealed and another Act was passed, fixing the charge on a single letter at 4d. for 15 miles, 5d. for 20 miles, 6d. for 30 miles, and so on up to 1s. for 300 miles. In 1837 a post-office was established in Melbourne, and a fortnightly mail was established between that city and Sydney. Stamps were introduced in the same year in the shape of stamped covers or envelopes, which are believed to have been the first postage-stamps ever issued. By 1838 there were 40 post-offices in the colony of New South Wales, which at that time, of course, included the territory now known

as Victoria and Queensland; and in the Sydney office about 15 persons were employed. The revenue of the Department for the year was £8,390, and the expenditure £10,347; while payments were made by the New South Wales Government to the post office at Korraika, in New Zealand, which was not created a separate colony until 1841. In 1847 an overland mail between Sydney and Adelaide was established. Stamps in their present form were issued in 1849, and the postage rates were fixed at 1d. per ½ oz. for town and 2d. for country letters, at which they remain in most of the colonies to-day.

Regular steam mail communication with Great Britain was first established in 1852. Until that time the Australian colonies had to depend upon the irregular arrival and despatch of sailing vessels for the carriage of mails; but in the year mentioned the steamships Australia, Chusan, and Great Britain were despatched from England, making the voyage in 60 days, and causing a strong desire in the minds of the colonists for a more frequent and steady system of steam communication with the Old World. The outbreak of the Crimean War in 1854 hindered for a while the accomplishment of this object; but in 1856 a line of steamers was again laid on, and the service was carried on by the Peninsular and Oriental Company and the Royal Mail Company for some years, but without giving so much satisfaction to the public as might have been expected.

As far back as 1854 a proposal was made for the establishment of a line of mail packets *via* Panama, and negotiations on the subject were carried on for several years between the British Government and the Governments of New South Wales and New Zealand. The result was that in 1866 the service was started, and continued in operation until the end of 1868, when it was terminated through the failure of the company by which it had been carried out. In the following year New South Wales, in conjunction with New Zealand, inaugurated a mail service *via* San Francisco, which, with a few interruptions and under various conditions, has been continued up to the present time.

The establishment of a mail route *via* America had the effect of stimulating the steamship-owners who were engaged in the service *via* Suez, and from that time there was a marked improvement in the steamers employed, as well as in the punctuality and speed with which the mails were delivered. The Peninsular and Oriental Company have carried mails for the colonies almost from the inception of the ocean steam service, with very few interruptions. Towards the end of 1878 the Orient Company commenced carrying mails between Australia and the United Kingdom, and have continued to do so ever since. In the year 1883 the fine steamers of the Messageries Maritimes of France entered the service, followed in 1887 by the North German Lloyd's, so that there are now sometimes two or even three mails received and despatched every week, and a voyage to Europe, which was formerly a formidable undertaking, involving great loss of time and much discomfort, is regarded as a mere pleasure trip to fill up a holiday.

In the year 1893 another mail service was established, by a line of steamers running from Sydney to Vancouver Island, in British Columbia. This line seems likely to open up a valuable trade between the Australian colonies and British North America. There is also a line of steamers running between Brisbane and London, but the colonies other than Queensland make little use of these vessels.

Growth of Postal Business.

The growth of postal business in each of the colonies during the thirty-five years from 1861 to 1896 is shown below. It will be seen that the number of letters for all Australasia in 1861 was less than is now transacted by any individual colony, Tasmania and Western Australia excepted. The true total for Australasia is, of course, not to be found by adding the figures of the several colonies together, as intercolonial letters are counted both in the colony from which they are despatched and in that in which they are received for delivery. A second total is therefore given from which this excess has been excluded :—

Colony.	Post Offices.		Letters and Post-cards.		Newspapers.		Packets.	
	1861.	1896.	1861.	1896.	1861.	1896.	1861.	1896.
New South Wales....	340	2,009	4,369,463	70,301,900	3,384,245	45,558,300	105,338	15,603,600
Victoria	369	1,572	6,109,929	61,602,700	4,277,179	30,305,000	....	9,256,000
Queensland	24	1,100	515,211	17,590,700	427,489	11,645,300	3,555	4,996,400
South Australia	160	676	1,540,472	18,765,000	1,089,424	9,551,700	....	1,895,000
Western Australia ..	..	438	193,317	10,097,700	137,476	6,243,000	....	2,011,800
Tasmania	100	328	835,873	7,551,800	895,656	4,861,900	....	2,343,600
New Zealand	..	1,464	1,236,768	31,673,900	1,428,351	13,216,500	....	12,647,300
Australasia.....	..	7,587	14,801,033	217,583,700	11,639,820	121,381,700	....	48,753,700
Australasia(excluding intercolonial excess)	..	..	14,061,000	201,264,900	10,941,400	113,613,000	....	45,243,000

For Victoria an estimate of the number of letters and postcards transmitted in 1896 has been made, as the figures are not given by the postal authorities of that colony. It is based on a careful analysis of the departmental revenue, and is believed to approach closely to the actual business transacted during the year. For Victoria, also, the

newspapers and packets carried in 1896 have been estimated, as the returns of the postal authorities only cover the intercolonial and international business. A corresponding table to that already given, showing the number of letters, newspapers, and packets per head of population, is appended :—

Colony.	Letters and Post-cards.		Newspapers.		Packets.	
	1861.	1896.	1861.	1896.	1861.	1896.
New South Wales	12	55	10	35	1	12
Victoria	11	52	8	26	.....	8
Queensland	17	38	14	25	1	11
South Australia	13	52	9	27	.....	5
Western Australia	12	84	9	52	.....	17
Tasmania	9	46	10	30	.....	14
New Zealand	14	45	16	19	.....	18
Australasia*	11	47	9	27	.....	11

* Intercolonial excess excluded.

The colonies of Western Australia and New South Wales take the lead in letters and post-cards, as well as in the transmission of newspapers, while in the matter of packets New Zealand apparently transacts a greater amount of business proportionally than the other colonies. A comparison of the average number of letters and post-cards per head of population in Australasia with similar figures for the principal countries of the world is afforded by the table given below. It will be seen that on a population basis the correspondence of Australasia exceeds that of any of the countries named, with the exception of the United Kingdom and the United States of America :—

Country.	Letters and Post-cards per head.	Country.	Letters and Post-cards per head.
United Kingdom	56	Sweden	13
United States	51	Norway	13
Australasia	47	Hungary	9
Switzerland	40	Chili	7
Germany	31	Italy	7
Canada	30	Portugal	6
Denmark	29	Spain	5
Austria	25	Roumania	4
Argentine Republic ...	24	Greece	2
Netherlands	23	Bulgaria	2
Belgium	21	Russia	2
France	19		

The inland letter postage is 1d. per ½ oz. on town and 2d. on country letters in all the colonies except Victoria and South Australia, where the charge is 2d. per oz. and ½ oz. respectively on all letters posted for delivery within the colony. In Victoria the minimum charge was in 1890 reduced to 1d.; but the loss was too great, and in 1892 the rate was again raised to 2d., at which it still remains. In New South Wales the city and suburban rate of 1d. per ½ oz. has been extended to nearly fifty of the principal country towns. The intercolonial rate is uniformly 2d. per ½ oz. in Australasia. The most liberal inland newspaper rates are to be found in New South Wales, Western Australia, and Tasmania, where newspapers printed within the colony are transmitted free if posted within one week of publication, although in New South Wales the maximum weight which escapes postage is 10 oz. It is, therefore, only natural that those colonies, as shown in the table given on page 195, should exceed their neighbours in the average number of newspapers carried per head of population. In Victoria and New Zealand the charge is ½d. each, and in South Australia and Queensland ½d. per 10 oz. The intercolonial postage on newspapers is ½d. per 10 oz. in New South Wales, Victoria, South Australia, and Western Australia, and 1d. each in New Zealand, to all colonies except Queensland, to which province the charge is ½d. for every 2 oz. In Tasmania newspapers posted to Western Australia and New Zealand are carried free if posted within seven days of publication; to Queensland the charge is ½d. for every 2 oz.; and to the other colonies, ½d. each. In Queensland the uniform charge to the other provinces is ½d. per 2 oz.

Registered Letters.

The number of registered letters and packets passing through the post-offices of the Australasian colonies has largely increased of late years, and in New South Wales the number which passed through the General Post Office alone in 1892 was no less than 1,075,241, an increase of 203 per cent. in seven years. This large increase was not, however, a natural growth, but arose chiefly from correspondence relating to so-called "consultations," or lottery sweeps connected with horse-racing, which were established in Sydney, and to support which large sums of money were sent to that city from all parts of Australasia, as well as from other countries. Probably not less than 600,000 of the total for New South Wales in 1892 were associated with these lotteries. The Government of that colony dealt with the evil in an amending Postal Bill in 1893, and this illicit branch of the postal traffic was removed to Queensland, the number of registrations dealt with at all post-offices in New South Wales in 1894 being 938,546—a reduction of 174,362 letters at the General Post Office alone during the year—while in the northern colony the registered letters in 1894 numbered 430,148, an increase of 158,656 on the figures for the previous twelve months.

In 1895 the registered letters dealt with in New South Wales numbered only 902,448, but in 1896 the total reached 1,000,665. In the colony of Queensland the registered letters increased to 541,148 in 1895; but in the beginning of 1896 the Parliament passed an Act making these lotteries illegal, and the evil was transferred to Hobart, the registrations in the northern colony in 1896 numbering only 190,153. In Western Australia 342,518 registered letters and packets were passed through the head office during 1896; while in New Zealand the registered articles dealt with numbered 355,671. For Victoria, South Australia, and Tasmania no particulars of registrations whatever are available.

Parcels Posts.

Excepting Western Australia, where there was no inland service, there were inland, intercolonial, and international parcels posts in operation in 1896; but statistics of the services on a uniform basis are not obtainable. During the year there were passed through the post-office of New South Wales 506,111 parcels, weighing 1,780,648 lb., and having a value of £197,763, the postage collected amounting to £32,180; in Victoria 250,019 parcels, yielding a revenue of £12,744, were dealt with; in Queensland the number of parcels which passed through the post-office was 168,023, weighing 674,912 lb., and the revenue derived from the service amounted to £9,926; in Western Australia 23,944 parcels, the declared value of which was £44,189, were dealt with; in Tasmania 6,927 inland and 1,637 ship parcels were posted during the year, while 10,922 packets and parcels, valued at £11,903, were received from the United Kingdom and the other colonies; and in New Zealand the parcels dealt with numbered 186,611, weighing 654,334 lb., of which 19,909, weighing 64,473 lb., and valued at £36,438, were received from places outside the colony; and 7,522, weighing 17,060 lb., and valued at £7,703, were despatched from the colony. No particulars are available of the South Australian service; but allowing the average rates of the other provinces, the total business of that colony represented 131,600 parcels, weighing about 475,400 lb., and valued at £61,750.

Money Orders and Postal Notes.

In all the colonies there are money order and postal note systems in operation, and in all the colonies except Victoria, Queensland, and South Australia post-office savings banks. In Queensland there is a Government Savings Bank, but it is not placed under the administration of the Postmaster-General. The Victorian Post Office Savings Bank was amalgamated with the Commissioners' Savings Bank in September, 1897. Particulars of the working of these services will be found in the chapter dealing with Private Finance.

Postal Facilities.

The following table shows the number of inhabitants and the area in square miles to each post-office for the year 1896. It will be seen that the most sparsely populated colonies have the greatest number of post-offices in comparison with their population, but in order to judge of the relative extension of postal facilities the area of country to each office must also be taken into account:—

Colony.	Number of Inhabitants to each Post Office.	Number of Square Miles of Territory to each Office.
New South Wales	646	155
Victoria	747	56
Queensland	429	608
South Australia	533	1,337
Western Australia	315	2,228
Tasmania	506	80
New Zealand	488	71
Australasia	570	406

Ocean Mail Services.

The Federal Ocean Mail Service, which is carried on by the Orient and Peninsular and Oriental Steam Navigation Companies, is subsidised by the United Kingdom and all the Australasian colonies, with the exception of New Zealand. New contracts were entered into on the 1st February, 1898, for a period of seven years. The total amount of the subsidy is £170,000, of which £95,000 is payable by the Imperial authorities and £75,000 by the colonies in proportion to their population. The sea transit rates collected from other countries and colonies making use of the service are credited to the Imperial and Colonial Governments in proportion to the amount of their contribution towards the subsidy. The following table shows the amount of the subsidy payable by each of the colonies during 1896, on the basis of the population at the end of the preceding year. In addition to the subsidy, there are other charges in connection with the service, such as transit rates in France and

Italy and in Australia. After adding these, and deducting the postages collected in the colonies, and the proportion of sea transit rates payable by other countries using the service, the net cost to New South Wales in 1896 was £10,510, and to Victoria £6,807, as shown in the table given below. For the other colonies, the net cost of the service is not obtainable. New Zealand, although not a contracting party, yet avails itself of the Federal Service for the carriage of mail matter, and its net loss during the year amounted to £2,074 :—

	Subsidy, 1896.	Net Cost, 1896.
United Kingdom	£95,000	.....
Australasia—		
New South Wales	£27,076	£10,510
Victoria	25,040	6,807
Queensland	9,758	.....
South Australia	7,573	.....
Western Australia	2,145	.....
Tasmania	3,408	.....
	£75,000	.....
Total	£170,000	.....

The mail service has been performed with great regularity and expedition. The average time occupied by the outward and homeward services in 1896 was as follows :—

	Orient.	P. and O.
London to Sydney	$34\frac{4}{13}$ days.	$33\frac{23}{26}$ days.
Sydney to London	$33\frac{25}{26}$,,	$34\frac{9}{26}$,,

On several occasions the mails from London have been delivered in Sydney in 31 days.

In addition to the Federal Ocean Mail Service *via* Suez, New South Wales and New Zealand until November, 1890, subsidised the Union Steamship Company, in conjunction with the Pacific Steamship Company, for a four-weekly service *via* San Francisco, to the amount of £37,000, of which New South Wales paid £25,750, and New Zealand £11,250. Under the new contract which was entered into, the amount of the subsidy was largely reduced, the contribution being based on the weight of mail matter carried, and New South Wales made an annual payment of £4,000 to the New Zealand Government, subject to appropriation by Parliament. Various extensions of the contract have been made, and at present the New Zealand Government guarantees a minimum payment of £7,500, and a similar sum to the Canadian-Australian Line running to Vancouver, thus securing a fortnightly Pacific service. During the year 1896 the net cost of the service to New Zealand was £7,605; to New South Wales, £1,645; and to

Victoria, £194. The average time occupied in carrying the mails by the San Francisco route during the same year was as follows:—

London to Sydney	$38\frac{8}{13}$ days.
Sydney to London	$37\frac{7}{16}$,,

During 1893 a calendar monthly service between Sydney and Vancouver was established by the Canadian-Australian Royal Mail Line, the colony of New South Wales granting an annual subsidy of £10,000, and the Canadian Dominion one of £25,000. This action was taken more in the interests of trade between the great British colonies in Australasia and America than in those of the postal service. The Government of New Zealand has guaranteed a minimum payment of £7,500 annually to this line in consideration of Wellington being made a port of call. It is proposed to establish a fast Atlantic service, to be subsidised by the British and Canadian Governments. During 1896 the net cost of the Vancouver service to New South Wales was £7,717; and to Victoria, £397. The average time occupied by the mails in transit from Sydney to London was $38\frac{8}{11}$ days.

The Queensland line of steamers, sailing from Brisbane *via* Torres Straits, carry mails for the Queensland Government, payment being made according to weight. This route is from four to ten days longer than those previously mentioned. Queensland, under a former contract, paid the company an annual subsidy of £55,000. This arrangement ceased in January, 1890, and under a new contract the colony agreed to pay the company an annual subsidy of £19,800 for a four-weekly, or £32,500 for a fortnightly service. The latter service was commenced on 1st July, 1890, the monthly service having lasted nearly six months; but in November, 1891, the contractors, on account of the heavy losses under the fortnightly system, were allowed to revert to the four-weekly service, the subsidy being reduced to the smaller amount mentioned above, viz., £19,800. When the contract expired, an agreement was arrived at for the institution of a subsidised service for purely commercial purposes. This arrangement lasted but a short time, when the subsidy was abandoned by the shipping company, who preferred to run their steamers without restriction. Payment is now only made in accordance with the weight of the mails carried. The amount of mail matter despatched from the other colonies by the Torres Straits route is very small.

Besides those mentioned, the other steamship companies trading with the Australasian colonies carry mails, notably the Messageries Maritimes Company and the North German Lloyd's, sailing from Sydney; and the Shaw, Saville, and Albion Company, and the New Zealand Shipping Company, sailing from Lyttelton, *via* Magellan Straits. The companies are paid by the colonies in proportion to the weight of mail matter carried, but the Messageries Maritimes Company and the North German Lloyd's are in receipt of large subsidies from the French and German Governments respectively.

The postage to the United Kingdom was reduced in January, 1891, from 6d. per ½ ounce *via* Italy and 4d. *via* the long sea route to the uniform rate of 2½d. In 1891 the colonies were represented at the Congress of the Universal Postal Union held in Vienna, and on July 4 a convention was signed on their behalf, by which they joined the Union from the 1st October of that year. From that date the rate of postage to all British colonies and possessions and foreign countries included in the Union was reduced to 2½d.

A common scale of postage on newspapers to the United Kingdom and foreign countries has been adopted by the Australasian colonies, the rate being 1d. for the first 4 ounces, and ½d. for every additional 2 ounces.

TELEGRAPHS.

The electric telegraph was introduced into these colonies almost at the time of the earliest railway construction. The first telegraph messages were sent in New South Wales in 1851. In Victoria the telegraph line from Melbourne to Williamstown was opened in 1854. The first line in South Australia, from Adelaide to Port Adelaide, was opened in 1856; and the first Tasmanian line was completed in 1857. In New Zealand the first telegraph office was opened in 1862; and the line from Brisbane to Rockhampton, the first in Queensland, was opened in 1864. Telegraphic communication was established between Sydney, Melbourne, and Adelaide in 1858. The first telegraph in Western Australia was opened in 1869, and communication between that colony and all the others of the group was completed in 1877.

All the colonies show very rapid progress in regard to telegraphic matters during the period from 1871 to 1881. In the case of Queensland this increase was largely due to the construction of the line to the Gulf of Carpentaria; and in the case of South Australia, to the construction of the lines to Port Darwin and to Eucla, on the boundary of Western Australia. The following table shows the length of telegraphic lines in each colony at the last four census periods, as well as for the year 1896, as far as the returns are available :—

Colony.	1861.	1871.	1881.	1891.	1896.
New South Wales ...	1,616	*4,674	8,515	11,697	12,418
Victoria	.....	*2,295	3,350	7,170	7,528
Queensland	169	2,525	6,280	9,996	10,026
South Australia	597	1,183	4,946	5,640	5,865
Western Australia ...	.....	*750	1,585	2,921	5,429
Tasmania	.....	*291	928	2,082	1,813
New Zealand.....	.....	2,015	3,824	5,349	6,285
Australasia ...	.....	13,733	29,428	44,855	49,364

* In 1873.

The next table gives similar particulars, only the figures represent miles of wire instead of miles of line :—

Colony.	1861.	1871.	1881.	1891.	1896.
New South Wales.....	1,981	5,579	14,278	24,780	30,820
Victoria	.....	3,472	6,626	13,989	14,441
Queensland	169	2,614	8,585	17,646	18,036
South Australia	915	1,718	7,228	12,707†	11,590
Western Australia ...	.....	*750	1,593	3,546	6,949
Tasmania	.....	241	1,157	3,178	3,028
New Zealand.....	.....	3,287	9,653	13,235	16,471
Australasia	.....	17,661	49,120	89,081	101,335

* In 1873. † Including telephone wires.

In 1896 there were 636 miles of cable from New Zealand to Sydney and from Tasmania to Melbourne, in addition to the length shown above. The number of telegrams passing along the wires of each colony and the revenue received by the Telegraph Departments during the year 1896 were as appended. In the total for Australasia a correction has been made for intercolonial telegrams recorded in both the despatching and the receiving colony :—

Colony.	Number of Telegrams.	Revenue received.
New South Wales	2,796,776	£159,741
Victoria	1,872,615	108,722
Queensland	1,134,006	71,758
South Australia	1,209,419	102,375
Western Australia	1,178,406	99,088
Tasmania	208,784	14,051
New Zealand	2,520,169	100,386
Australasia	10,920,175	£656,121
Australasia (Intercolonial excess excluded).	9,441,000	.....

In the whole of Australasia there are 3,387 telegraph stations, of which 856 are in New South Wales, 791 in Victoria, 377 in Queensland, 254 in South Australia, 111 in Western Australia, 218 in Tasmania, and 780 in New Zealand.

In no country in the world has the development of telegraphic communication been so rapid as in Australasia, and in none has it been taken advantage of by the public to anything like the same extent. Taking Australasia as a whole, there are only four countries that possess a greater extent of telegraph lines, and only seven in which a larger number of messages are actually sent. In no other country, however, except the United Kingdom, does the number of messages bear anything approaching the same ratio to the population. The following table illustrates these remarks :—

Country.	Length of Telegraph Lines.	Messages.	Messages per head of population.
	miles.	No.	No.
United Kingdom	41,073	82,116,679	2·1
France	58,888	44,708,298	1·2
Belgium	3,956	5,704,461	0·9
Netherlands*	3,537	4,621,954	1·0
Germany	84,370	38,392,224	0·7
Denmark	2,945	1,849,768	0·9
Sweden	5,399	2,275,717	0·5
Norway	5,232	1,835,145	0·9
Austria-Hungary	33,518	20,360,638	0·5
Switzerland	4,436	3,848,489	1·3
Italy	24,539	10,033,284	0·3
Spain	19,924	5,433,362	0·3
Portugal	3,985	1,354,827	0·3
Russia	83,387	15,592,758	0·1
Roumania	4,269	2,373,121	0·4
United States†	190,418	58,109,860	0·9
Canada	31,735	3,945,744	0·8
Cape Colony	6,465	2,229,663	1·2
Argentine Republic	25,345	6,447,122	1·7
Australasia	49,364	9,441,000	2·2

* Government lines only. † Western Union Company only.

From the above table it appears that in Australasia during the year two and a fifth messages were sent over the telegraph for each inhabitant. In the United Kingdom the number was two and one-tenth for each inhabitant; and in the United States of America about one message to every inhabitant. The return for the United States, however, includes only the lines of the Western Union Company, who own the principal part of the telegraph system of that country. In the Argentine Republic, one and three-fourths ; in Switzerland, one and a

third message; in France, one and a fifth; in Holland and Belgium, one message; and in Germany, Denmark, and Norway about one message was sent for every person; in Austria-Hungary, Roumania, and Sweden, one message for every two persons; in Italy, Spain, and Portugal about one message for every three persons; and in Russia, one message for every ten persons. In Cape Colony rather more than one message, and in Canada rather less than one message, was sent for every inhabitant during the year.

Cable Services.

Australasia is in telegraphic communication with Europe and the rest of the world by means of three cables connecting with the various Asiatic continental lines. The first of these cables, which were all laid by the Eastern Extension Telegraph Company, Limited, was opened in October, 1872, joining Port Darwin to Banjowangie, in Java, whence communication is provided with Europe by way of Batavia, Singapore, Madras, and Bombay. In 1879 a duplicate cable was laid down, the colonies of New South Wales, Victoria, South Australia, Western Australia, and Tasmania agreeing to pay the company a subsidy of £32,400 per annum for a period of 20 years, the amount to be apportioned between the colonies on the basis of population. At Port Darwin the cables connect with an overland wire, which extends to Adelaide, a distance of 1,971 miles, and to construct which cost the South Australian Government about half a million sterling. The total length of line between Adelaide and London is 12,570 miles, of which 9,146 miles are submarine cable, and 3,424 miles overland wire. The third cable was laid in 1888 from Broome, in Roebuck Bay, Western Australia, to Banjowangie. The length of line by this route from Perth to London is 12,296 miles, 10,811 being cable and 1,485 land wire. The eastern colonies are connected with Broome by a line running from Adelaide, *via* Port Augusta, Eucla, and Albany, to Perth.

The cable joining Tasmania to the continent of Australia was laid in 1869, the length being about 170 miles. It starts from the township of Flinders, near Cape Schanck, in Victoria, and terminates at Low Head, at the mouth of the Tamar, in Tasmania. This line is subsidised to the extent of £4,200 yearly by the colonies of New South Wales, Victoria, South Australia, Western Australia, and Tasmania, the contributions being based on the population figures. New Zealand was joined to the continent by a cable laid in 1876, the length being about 1,191 miles. The line has its Australian terminus within sight of the spot where Captain Cook landed on the shores of Botany Bay, and within a stone's throw of the monument of La Perouse. The New Zealand terminus of the cable is at Wakapuaka, near Nelson, on the Middle or South Island, whence another cable, 109 miles in length, is laid to Wanganui, in the

North Island, with an alternate line from White's Bay across Cook Strait to Wellington. For the first ten years after its opening the New Zealand cable was subsidised by the Governments of New South Wales and New Zealand, their annual contributions being £2,500 and £7,500 respectively. During 1893 the cable rates to New Zealand were reduced from 6s. to 3s. for 10 words, ordinary messages. An amount of £20,000 is guaranteed to the Company, and the deficiency is paid by the Australasian Governments at the rate of one-third by New Zealand, and the remaining two-thirds by the contributing colonies, including New Zealand. The deficiency for the year ended 30th April, 1897, was £3,856, of which New Zealand paid £1,285, and the remaining sum of £2,571 was distributed over the colonies as shown in the table on page 206. Queensland joined the guarantee fund in July, 1897. A cable connecting New Caledonia with Queensland at Bundaberg was opened in October, 1893. It was constructed by a French company, and is guaranteed by the French Government to the extent of £8,000, and by the colonies of New South Wales and Queensland to the amount of £2,000 each annually for a period of thirty years, in return for which these two Australian Governments are entitled to use the cable for the transmission of official messages up to the amount of the guarantee.

During the year 1890 the colonies opened negotiations with the Eastern Extension Telegraph Company for a reduction in the cable rates to Europe, which at that time were 9s. 4d. per word for ordinary messages and 2s. 8d. per word for press messages sent from New South Wales; and at a conference of the postal and telegraphic authorities a proposal to reduce the tariff to 4s. per word for ordinary messages and 1s. 10d. per word for press messages was agreed to, the colonies contributing to the subsidy undertaking to make good half the loss which the company would sustain by this reduction in the schedule of charges, and New South Wales, Victoria, Western Australia, Tasmania, and New Zealand at the same time agreeing to pay to South Australia a proportion of the loss to the revenue of that colony which the lower charges would cause in the working of the overland wires. The amended tariff came into force in May, 1891, and the amount to be guaranteed to the company for the portion of the year during which the contract was in existence was £158,491. The sum earned by the company for the same period was £120,141, so that the deficiency on the eight months' business was £38,350, one-half of which was made good by the contributing colonies according to population. But this sum, combined with the amount of the subsidy, was more than the colonies were prepared to bear, and on the 1st January, 1893, the rates were again slightly raised, and stand now at 4s. 11d. per word from Sydney to London for ordinary messages, and 1s. 10d. for press messages. Even at these charges there was a loss to be borne, the total amount payable to the cable company being £21,778 in 1893 (as compared with £27,520 in 1892), and £6,191 in 1894; and to the South Australian

Government £7,675 in 1893 (as compared with £10,415 in 1892), £822 in 1894, and £1,125 in 1895. Since the years mentioned the amounts guaranteed—now £227,000 to the cable company, and £37,552 to the South Australian Government—have been met by the revenue, and the colonies have therefore not been called upon to contribute. Queensland has now joined the other colonies in the guarantee.

The following table shows the amount paid by each colony towards cable subsidies and guarantees during the year 1896. The proportions are based on the 1891 census populations :—

Colony.	Port Darwin—Banjowangie Subsidy.	Tasmanian Subsidy.	New Zealand Guarantee.	Total.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
New South Wales ...	13,150 15 10	1,704 14 8	853 15 5	15,709 5 11
Victoria	13,245 13 11	1,717 0 8	859 18 8	15,822 13 3
Queensland	.....	.....	.....	.....
South Australia	3,721 15 6	482 9 1	241 12 6	4,445 17 1
Western Australia ...	578 4 3	74 19 1	37 10 9	690 14 1
Tasmania	1,703 10 6	220 16 6	110 11 11	2,034 18 11
New Zealand	.....	.....	467 10 9	467 10 9
Australasia.....	32,400 0 0	4,200 0 0	2,571 0 0	39,171 0 0

The desirability of constructing a Pacific cable, which shall touch only British territory on its way from Australia to America, is acknowledged by the Governments of most of the Australasian colonies as well as by those of the United Kingdom and Canada, and a Commission was appointed, consisting of two representatives of Great Britain, two of Canada, and two of Australasia, to decide upon the best route to be taken, the probable cost of construction of the line, and the basis upon which the three countries should contribute. The report of this Commission, which has not yet been made public, recommends the construction of a cable with the landing places entirely in British territory, and the distribution of the cost of construction and maintenance equally between Great Britain, Canada, and Australasia. In response to a call for tenders by the Colonial Conference, which sat in Ottawa in 1894, a company offered to lay the cable and maintain it for the space of three years for the sum of $1\frac{1}{2}$ millions sterling. The completion of such a work would have the effect of largely reducing the cable rates to America and Europe, besides being of immense service in the event of an outbreak of war. At a conference of the Premiers of New South Wales, Victoria, and Queensland, held in Sydney on the 20th August, 1898, it was agreed to offer, on behalf of those colonies, to pay three-ninths of the cost of the outlay, and New Zealand has consented to pay another ninth part.

TELEPHONES.

In connection with the telegraph departments of the various colonies, telephone exchanges have been established in the capitals and other important centres of population. In order to popularise the use of the instrument, the charges in some of the colonies have lately been reduced, and the result is seen in a satisfactory extension of this means of communication. Information regarding telephones in the different colonies during 1896, as far as can be ascertained, will be found in the following table :—

Colony.	Exchanges.	Telephones.	Length of Telephone Wires.	Revenue.
	No.	No.	miles.	£
New South Wales	22	5,459	.....*	31,955
Victoria	13	2,939	10,135	37,511
Queensland.....	22	840	1,043	5,228
South Australia...	8	1,022	2,749	15,514
Western Australia	6	942	577	6,264
Tasmania.....	4	722	549	3,382
New Zealand	29	5,747	5,201	29,249
Australasia	104	17,671	.....	129,103

*Not ascertained.

In the Australasian colonies the rates for telephones at places of business range from £5 to £10 for the minimum length of wire—generally one mile, the colonies with a half-mile radius being New Zealand and Queensland—and the charge is higher in the city than in the country. In New South Wales and Victoria the city and suburban rates are £9 per annum, and the country rates, £8. In South Australia the city rate is higher, being £10 ; but in the suburbs and country the rates range from £6 to £8. Queensland, for a radius of half-a-mile, has a uniform rate of £6, which is also the charge made in Tasmania, for a one mile radius, in Hobart, Launceston, and Zeehan, while for the suburbs and country districts the rate is a matter of arrangement. In New Zealand a distinction is drawn between exchanges continuously open and not continuously open, the charges being respectively £7 and £5 ; while in Western Australia, in the towns of Perth, Fremantle, and Guildford, the rate is £7, and £10 where the exchange has less than 100 subscribers. The charges for telephones at private residences is, of course, less than for places of business. In New South Wales, Victoria, and New Zealand, the rate is uniformly £5 ; and in Queensland, £6. In South Australia the charge is £6 for the city, and from £6 to £8 in the suburbs and country ; in Tasmania, it is £4 10s. in Hobart, Launceston, and Zeehan, and a matter of arrangement in the suburbs and country ; while in Western Australia, at Perth, Fremantle, and Guildford, the charge is £5, and £6 where the exchange has less than 100 subscribers.

Postal and Telegraphic Finances.

The following table shows the revenue and expenditure of the Postal and Telegraph Departments of the colonies during 1896 :—

Colony.	Revenue.				Expenditure.
	Posts.	Telegraphs.	Telephones.	Total.	
	£	£	£	£	£
New South Wales	503,930	159,741	31,955	695,626	743,841
Victoria	367,968	108,722	37,511	514,201	509,382
Queensland	161,726	71,758	5,228	238,712	302,201
South Australia	129,215	102,375	15,514	247,104	196,024
Western Australia.....	82,257	99,088	6,264	187,609	209,210
Tasmania	64,153	14,051	3,382	81,586	61,314
New Zealand.....	262,482	100,386	29,249	392,117	353,700
Australasia.....	1,571,731	656,121	129,103	2,356,955	2,375,672

The revenue set down for Victoria is but an approximation, as the receipts for postage are merged with those for stamp duty under the general heading of fees. In other colonies postage stamps are also used for the purpose of stamping acknowledgments for the receipt of money. During 1896 the New South Wales Post Office made an allowance of £24,000 on this account, and this sum is not included in the revenue of that colony as given above. In the expenditure shown in the table, interest on the outlay on post-office buildings and telegraph lines and maintenance of buildings is not taken into account. If allowance be made for these, the total expenditure and the deficiency in revenue would be as follow :—

Colony.	Expenditure, inclusive of Interest and Maintenance.	Deficiency in Revenue.
	£	£
New South Wales	837,944	142,318
Victoria.....	607,405	93,204
Queensland	354,176	115,464
South Australia	256,035	8,931
Western Australia	231,809	44,200
Tasmania	69,036	*12,550
New Zealand	413,747	21,630
Australasia ...	2,770,152	413,197

* Excess of Revenue.

It is estimated that, under uniform letter postage of 2d. and 1d. per half-ounce, the following increases or decreases in the departmental revenues would result:—

Colony.	Increased Revenue from imposition of 2d. Rate on all Inland Letters.	Decreased Revenue from imposition of 1d. Rate on all Australasian Letters.		
		Town and Inland.	Intercolonial.	Total.
	£	£	£	£
New South Wales	45,000	95,000	18,650	113,650
Victoria	10,000	135,000	12,450	147,450
Queensland	13,500	14,500	3,300	17,800
South Australia	.....	40,000	6,000	46,000
Western Australia	6,250	8,500	6,000	14,500
Tasmania	5,500	5,000	2,350	7,350
New Zealand	27,500	27,500	2,600	30,100
Australasia	107,750	325,500	51,350	376,850

Were a uniform newspaper postage of ½d. imposed, it is estimated that the revenue derivable therefrom in those colonies which now carry a portion of their newspapers free would be as follows:—

	£
New South Wales	25,000
Western Australia	2,000
Tasmania	4,000
Total increase	£31,000

As regards telegraphic charges, it is estimated that a loss of £17,000 would result to the revenue of the New South Wales Telegraph Department by an assimilation of rates to the Victorian rate of 9d. for nine words on all inland messages. A slight loss would probably also be experienced by the Western Australian and Tasmanian Departments; while it is considered that the South Australian revenue would not be affected by the change. If, on the other hand, the Victorian charges were altered to 6d. and 1s. for ten words of local and inland telegrams respectively—the rates in force in New South Wales, South Australia, Western Australia, and Tasmania,—it is not expected that any difference would be caused in the Victorian revenue by reason of the increased business that would result. Similar estimates for Queensland (where a uniform rate of 1s. for all inland messages is in force) and New Zealand (which imposes a rate of 6d. for all ordinary, and 1s. for urgent inland messages) have not been framed, as the available statistics do not distinguish inland telegrams from others.

MINERAL RESOURCES.

ALMOST all the principal metals of economic value are found in Australasia, and many are common to several colonies. In dealing with the occurrence and value of mineral deposits, a classification has been made into noble and other metals, carbon minerals, salts, stones and clays, and diamonds and other gem stones.

Gold.

Gold, the most valuable of noble metals, is found throughout Australasia, and the present prosperity of the colonies is largely due to discoveries of this metal, the development of other industries being, in a country of varied resources, a natural sequence to the acquisition of mineral treasure. Settlement in Australia was still young when many-tongued rumour spoke of the existence of the precious metal, but it was not until the 16th February, 1823, that the Government was officially apprised of a discovery destined to be the precursor of a prosperity seldom surpassed in the history of nations. On the date mentioned Mr. Assistant-Surveyor M'Brien reported that at a spot on the Fish River, about 15 miles east of Bathurst, he had discovered gold. Mention is made in the early records of New South Wales of several other finds, but it remained for Count Strzelecki and the Rev. W. B. Clarke to demonstrate the existence of the precious metal in payable quantities, and to assert their belief in its abundance, an opinion strongly supported in England by several eminent authorities, and substantiated by Hargraves' discovery in the year 1851. The gold-fields of Lewis Ponds and Summer Hill Creek had hardly been opened up when, on the day that witnessed the severance of the Port Phillip district from the mother colony of New South Wales, Mr. J. M. Esmond discovered gold in Victoria. Shortly afterwards a rush set in for Ballarat, and the gold fever took possession of Australia. The following year (1852) saw gold found in South Australia and Tasmania; the rush to Canoona, in what is now Queensland, took place in 1858; and gold was discovered in New Zealand in the same year, though it was not until 1861 that a large population was, by the prospect of rapidly obtaining wealth, attracted to the last-mentioned colony. The last of the seven colonies in which extensive deposits of the precious metal were found was Western Australia, to which province a great rush set in but a few years ago, although gold was discovered in payable quantities in 1882.

From the date of its first discovery, gold to the value of nearly 400 million pounds sterling, has been obtained in Australasia. Victoria,

which has, in a period of forty-five years, contributed about 250 millions to this total, is still the largest producer, its yield of the precious metal in 1896 being nearly three times as great as that of Western Australia, and more than one-fourth greater than the production of Queensland. There has been a notable increase in the output of gold in the colony during the past five years, the yield of 805,087 oz. in 1896 being the highest since the year 1882. This development is said to be due to the great improvement in gold-saving appliances; the prominence attained by the large and only partially-developed gold-fields of North and East Gippsland; and the investment of foreign capital in the mines. Attention has also been given by the State to the question of rendering practical assistance to the mining industry, and the Mines Development Act of 1896 authorises the expenditure of £140,000 during the ensuing three years. Mining tracks have been cut through the mountainous districts on a much more extended scale than hitherto, with the object of opening up the areas which were found difficult of access; and in other directions efforts have been made to stimulate the industry. In 1896 the Sandhurst district, with 191,941 oz., supplied the largest portion of the gold yield of the colony, followed by the Ballarat district with 160,317 oz., and Gippsland, with 116,056 oz. In Gippsland the increase in the output of late years has been very striking, the yield in 1892 having been only 39,919 oz. There were 32,123 men engaged in the search for gold in Victoria in 1896. Of these, 1,939 were Chinese, but the miners of this race are steadily decreasing in number.

Queensland promised at one time to overtake Victoria in the value of its annual gold yield, but in 1896 its production only amounted to £2,341,348, as compared with £3,220,348 in the southern colony. The output of Queensland, although higher than that of 1895, was less than in 1894, and did not quite reach expectation—due, first, to the dry season, and, second, to the failure of the mines to attract foreign capital. To the total production of the colony, the Mount Morgan mine contributes about one-fourth. At this mine the returns for the year showed a satisfactory advance on those of the previous twelve months. Large additions which are now being made to the reduction works will permit of the production of ore in greater quantity, and of the treatment of lower-grade material. When the new works are completed it is estimated that the capacity will be equal to an additional 50,000 tons per annum. In 1896 there were 1,541 men employed in the mine, being an increase of 400 during the twelve months. The number of men engaged in gold-mining in the whole of the colony was 10,364, of whom 758 were Chinese. As in Victoria, the number of Chinese finding employment on the gold-fields is decreasing.

In New South Wales the greatest annual production of gold occurred in 1852, soon after the first discovery of the precious metal, when it was valued at £2,660,946. The only other year which saw a production in excess of two millions sterling was 1862, the amount reaching £2,467,780. In 1874 the yield had fallen to 270,823 oz., valued at

£1,040,329; and thenceforth the industry declined considerably in importance, reaching its lowest point in 1888, when only 87,503 oz., valued at £317,100, were produced. From that date a steady improvement took place, and in 1894 the Government took the step of furnishing large numbers of the unemployed with miners' rights and free railway passes, and sending them to the abandoned alluvial fields as fossickers. This action, with the increased attention paid to quartz-mining, nearly doubled the production, the quantity obtained during the year being set down at 324,787 oz., valued at £1,156,717; while in 1895 the yield reached 360,165 oz., of a value of £1,315,929—the highest since 1873. In 1896, however, this yield was not maintained, the production amounting to 296,072 oz., valued at £1,073,360, making a total yield to date of 11,717,616 oz., of a value of £43,399,958. The principal seats of alluvial mining in the colony are the Bathurst and Mudgee districts, and the country watered by the various feeders of the Upper Lachlan, and also the Tumut and Adelong and Braidwood districts; while the principal quartz-veins are situated near Adelong, Bathurst, Armidale, Hill End, Orange, Parkes, and Wyalong. Besides the Mount Drysdale gold-field, in the Cobar district, discovered in 1893, the most important find of recent years was made at Wyalong, in the Lachlan district. The first prospecting claim on this field was registered on the 26th December, 1893, and in the early part of the following year there were over 10,000 persons on the ground. This number has now been reduced to reasonable proportions. In 1896 the quantity of gold obtained from this field was 33,495 oz., which was only exceeded by the yield from the Hillgrove district.

Until quite recently, Western Australia was considered to be destitute of mineral deposits of any value, but it is now known that a rich belt of mineral country extends from north to south. The first important discovery was made in 1882, when gold was found in the Kimberley district, but it was not until a few years later that this rich and extensive area was developed. In 1887 gold was found in Yilgarn, about 200 miles east of Perth, the find possessing importance because the precursor of the discovery of the immense tracts of gold-bearing country, the knowledge of the existence of which has drawn population from all parts of Australasia and brought the colony into the prominent position which it occupies at the present time. General attention was first attracted to these fields by further discoveries at Southern Cross, to the east of Yilgarn; and the sensational finds at Coolgardie which followed in 1892 resulted in a rush to Western Australia which was reminiscent of the experiences of the fifties in the older-settled portions of the continent. Thereafter, before the march of the prospector, the known gold-bearing area was rapidly extended, and in 1894 the country was divided into separate gold-fields, so extensive were the preparations for its exploitation. At the present time, there are thirteen gold-fields in the colony, the most important, from the point of production in 1896, being East Coolgardie and Coolgardie, in the eastern district;

and Murchison, in the central district. It is estimated that there are now over 20,000 miners actively engaged on the gold-fields. In 1896 the production amounted to 281,265 oz., valued at £1,068,808, as compared with 30,310 oz., valued at £115,183, in 1891.

In New Zealand, the production of gold in 1895 was valued at £1,162,164—the highest yield since 1880. There was a falling off in the following year; not, however, due to any scarcity of the precious metal, but mainly to the acquirement of many of the mining properties by English capitalists, and to the suspension of active operations necessitated by a change of policy involving development on a more extensive scale. Prospecting work is being vigorously pursued in the Auckland district, especially in the dense bush localities which have hitherto escaped exploration on account of their inaccessibility. It is stated that numerous lines of reef have been discovered, and that a large number of men are engaged in opening up the lodes. Greater attention is also being paid to the auriferous deposits in river-beds, and in deep wet ground on the southern gold-fields. It is estimated that seventy dredges, each of which is said to cost between £3,000 and £6,000, will shortly be at work upon these deposits. In 1896, the number of gold-miners in the colony was 14,889, of whom 1,989 were Chinese.

Although payable gold was found in Tasmania in 1852, yet it was not until the seventies that the metal was mined for on an extensive scale, the total production to the end of 1870 being less than 4,000 oz. Beaconsfield is the principal gold-field in the colony. It is situated on the west side of the river Tamar, 26 miles north-west of Launceston, and formerly produced a large quantity of alluvial gold, while the existence of a deep lead carrying good gold has now been proved. The Tasmania mine, on this field, is the largest gold producer in the colony, and has yielded to date £652,000 in dividends; while it is proposed to develop some of the outside mines with British capital. Although its yield is at present small, the Lefroy field has been another important centre of gold production. The reefs are now being proved to a greater depth. At Mathinna a large quantity of gold has also been obtained. The principal mine on this field is the New Golden Gate, the deepest in the colony, its main shaft being 1,280 feet. In about eight years it has yielded gold to the value of £350,000, and has paid £163,000 in dividends. At Mangana active prospecting has been going on for some time, and some rich stone was struck in 1898. In the Western District a little alluvial gold is obtained, while north of the Pieman River there is a large extent of auriferous country, but owing to the dense vegetation prospecting is difficult. On the whole, the gold-mining industry of the colony has made satisfactory progress during the last few years; indeed, the production in 1896, amounting to £237,574, was the highest recorded, and was nearly 63 per cent. higher than in 1893.

Of all the Australasian colonies, South Australia has produced the smallest quantity of gold, the total output from the commencement of

mining operations being valued at less than two millions sterling. In the province proper the yield is very small, amounting to but 4,031 oz. in 1896, the balance of 22,977 oz. being obtained from the Northern Territory. Here the mines are largely in the hands of Chinese, but a number of properties have recently been acquired by an English company, who are erecting the works necessary to their proper development. Of the 1,831 men engaged in gold-mining in the Northern Territory in 1896, no fewer than 1,638 were Chinese. About a fourth of these Chinese are physically incapable of doing a fair day's work, and are dangerous from a sanitary point of view. Possessed of no means whatever, and with no proper tools for the search for the precious metal, they eke out a miserable existence by mining a little alluvial gold.

The following table gives the value of gold raised from the commencement of mining to the close of the year 1896, with the proportion due to each province :—

Colony.	Production of Gold.	
	Value.	Proportion raised in each Colony.
	£	per cent.
New South Wales	43,399,958	11·2
Victoria	244,138,728	62·8
Queensland	39,196,465	10·1
South Australia	1,918,456	0·5
Western Australia	4,104,041	1·0
Tasmania	3,383,921	0·9
New Zealand	52,392,430	13·5
Australasia	388,533,999	100·0

It will be readily understood from the foregoing figures how Victoria, although in area the smallest of the group, with the exception of Tasmania, achieved the foremost position amongst the colonies, and retained that place so long as the powerful attraction of gold continued. But although the discovery of such extraordinary deposits as those of Mount Morgan, in Queensland, may astonish the world and give princely dividends to shareholders, the thirst for gold—so powerful in the past—cannot now entice any considerable proportion of the population from other pursuits, and this notwithstanding that only a small portion of the auriferous area of the continent has been explored, and a still smaller portion fully developed.

The production of gold, which had been declining steadily for many years, reached the lowest point in 1886. Since then there has been a marked revival, and, as will have been gathered from the previous pages, there is considerable activity in gold-mining in all the colonies at the present time. The production of gold in each province in 1896,

with the quantity obtained from alluvial deposits and the yield from quartz crushings where such information is available, is given below :—

Colony.	Weight of Gold.			Value of Gold.	
	Alluvial.	Quartz.	Total.	Total.	Proportion raised in each Colony.
	oz.	oz.	oz.	£	per cent.
New South Wales	68,534	227,538	296,072	1,073,360	11·8
Victoria	284,756	520,331	805,087	3,220,348	35·5
Queensland	30,724	609,661	640,385	2,341,348	25·8
South Australia	.....	.....	27,008	95,528	1·0
Western Australia	29,043	252,222	281,265	1,068,808	11·8
Tasmania	6,584	56,007	62,591	237,574	2·6
New Zealand	54,930	208,764	263,694	1,041,428	11·5
Australasia	.....	.....	2,376,102	9,078,394	100·0

In 1897 the production of gold in Australasia was 2,950,580 oz., an increase of 574,478 oz. on the quantity raised in the previous year. The increase or decrease in the yield of each of the colonies will be seen from the following table :—

Colony.	Gold yield in 1897.	Increase on previous year.	Decrease from previous year.
	oz.	oz.	oz.
New South Wales	292,217	.....	3,855
Victoria	812,766	7,679	.....
Queensland	807,928	167,543	.....
South Australia	33,899	6,891	.....
Western Australia	674,994	393,729	.....
Tasmania	77,131	14,540	.....
New Zealand	251,645	.....	12,049
Australasia	2,950,580	574,478	.....

The average value of gold won by each miner is given below, but as the conditions under which mining is carried on are by no means the same in every colony, the figures, which vary considerably, may be somewhat misleading. In those provinces where a revival of mining has lately been experienced, or, as in the case of Western Australia, where the colony is in its first stage of mining development, it is natural to expect a low average yield per miner, for mining as now carried out is not an industry from which immediate returns can be expected. It is probable that the number of gold-miners in New South Wales is largely overstated, otherwise the industry must be carried on at a great loss; and this will be the more apparent when it is remembered that a fairly large quantity of gold is obtained with other metals, the men employed

at the working of which are not classified as gold-miners. Most likely many of the men employ themselves in mining for only a portion of their time, and devote the rest to more remunerative pursuits. But when full allowance is made on this score, it will be evident that, in some colonies at least, the search for gold is not a profitable occupation. The following table shows the number of miners at work in 1896, with the quantity and value of gold won per man, in those colonies for which definite information is available :—

Colony.	Miners Employed.	Average production of Gold.	
		Quantity.	Value.
	No.	oz.	£ s. d.
New South Wales.....	22,207	13·33	48 6 8
Victoria	32,123	25·06	100 5 0
Queensland	10,364	61·79	225 18 3
Western Australia	20,236	13·90	52 16 4
Tasmania.....	1,461	42·84	162 12 3
New Zealand	14,889	17·71	69 18 11

Attempts have been made to ascertain the average yield from quartz, but the number of tests made and the quantity of stone treated are inconsiderable ; furthermore, it has not been found possible to obtain returns from all the principal mining centres. The results obtained for the five years ended 1896 were as given below. The high average yield for Queensland is due to the Mount Morgan mines, which for some years yielded one-third of the total gold production of that colony :—

Year.	New South Wales.			Victoria.			Queensland.			Northern Territory.			Western Australia.			Tasmania.		
	oz.	dwt.	gr.	oz.	dwt.	gr.	oz.	dwt.	gr.	oz.	dwt.	gr.	oz.	dwt.	gr.	oz.	dwt.	gr.
1892	0	19	19	0	9	23	1	6	20	.....			.....			0	14	19
1893	0	16	11	0	9	6	1	6	8	.....			.....			0	13	22
1894	0	14	8	0	8	8	1	4	5	0	13	12	.....			1	1	10
1895	1	7	1	0	8	7	1	1	6	0	19	3	.....			0	18	8
1896	0	17	20	0	9	10	1	3	10	0	14	4	1	10	5	0	19	23

It is not pretended that these figures have any great statistical value ; nevertheless they may be accepted as giving an approximate idea of the average yield of quartz-reefs. Alluvial deposits are generally richer than those in reefs ; but the precious metal is so unevenly distributed that any attempt to obtain a reliable average would be futile.

The greatest development of quartz-reefing is found in Victoria, some of the mines being of a great depth. At the end of 1896 there were five mines in the Bendigo district over 3,000 feet deep, and other five over 2,700 feet deep. In Lansell's 180 Mine a depth of 3,352 feet had

been reached, and in the Lazarus Mine, 3,185 feet. In the Stawell district a depth of 2,409 feet had been reached in the Magdala Mine.

The value of machinery on the gold-fields of those colonies from which returns were obtainable is appended. In all cases the figures refer to the year 1896 :—

Colony.	Value.
	£
New South Wales	693,198
Victoria	1,769,748
Queensland	1,199,123
Western Australia	880,475
Tasmania	412,500
New Zealand	819,111

A notice of gold-mining would be incomplete without some reference to the remarkably large finds made at various times. Information on this point is meagre and not altogether reliable, as doubtless many nuggets were unearthed of which particulars were never published. Victoria's record is the best, and includes the following nuggets :—

	lb.	oz.	dwt.
"The Welcome Stranger," found 9th February, 1869	190	0	0
"The Welcome," found 9th June, 1858	184	9	16
One found at Canadian Gully, 31st January, 1853	134	11	0

And others of the following weights :—98 lb. 1 oz. 17 dwt., 93 lb. 1 oz. 11 dwt., 84 lb. 3 oz. 15 dwt., 69 lb. 6 oz., 52 lb. 1 oz., 30 lb. 11 oz. 8 dwt., and 30 lb. 11 oz. 2 dwt.

New South Wales can boast of having produced some splendid specimens. In 1851 a mass of gold was found on the Turon, weighing 106 lb.; another, from Burrandong, near Orange, produced when melted at the Sydney Mint 1,182 oz. 6 dwt. of pure gold ; and a third, the "Brennan," was sold in Sydney in 1851 for £1,156. During 1880–82 several nuggets were discovered at Temora, weighing from 59 oz. to 1,393 oz. ; and others, of 357 oz., 347 oz. (the "Jubilee"), 200 oz., 47 oz., and 32 oz. respectively, were found during the year 1887 in various parts of the colony. Veins of gold of extraordinary richness have been worked in New South Wales. In January, 1873, at Beyers and Holterman's claim, at Hill End, 1·02 cwt. of gold was obtained from 10 tons of quartz, and a mass of ore, weighing 630 lb. and estimated to contain £2,000 worth of gold, was exhibited. The Mint returns for this mine during the year 1873 were 16,279·63 oz., valued at £63,234 12s.; obtained from 415 tons of stone. From Krohman's claim, at Hill End, gold to the value of £93,616 11s. 9d. was obtained during the same year. The foregoing figures, however, are insignificant when compared with the enormous yield of the Mount Morgan Mine, in Queensland, which, has paid over £4,500,000 in dividends. This mine, which may be designated one of the wonders of the world, is a huge mound of ore,

highly ferruginous, and contains gold to the extent of several ounces to the ton, the peculiar formation, in the opinion of the Government Geologist of Queensland, being due to the action of thermal springs.

For the ten years ended 1896, the world's production of gold is estimated to have been as follows :—

Year.	Value.	Year.	Value.
	£		£
1887	21,500,000	1892	29,900,000
1888	21,985,000	1893	32,600,000
1889	23,835,000	1894	36,765,000
1890	24,260,000	1895	41,000,000
1891	26,700,000	1896	45,000,000

Of the production of £45,000,000 in 1896, the Australian colonies produced 21·7 per cent.

Silver.

Silver has been discovered in all the colonies, either alone or in the form of sulphides, antimonial and arsenical ores, chloride, bromide, iodide, and chloro-bromide of silver, and argentiferous lead ores, the largest deposits of the metal being found in the last-mentioned form. The leading silver mines are in New South Wales, the returns from the other colonies being comparatively insignificant. Up to the year 1882 the quantity of silver raised in New South Wales was very small, but in that and the following years extensive discoveries of the metal, associated principally with lead and copper ore, were made in various parts of the colony, notably at Boorook, in the New England district, and later on at Sunny Corner, near Bathurst, and at Silverton and Broken Hill on the Barrier Ranges in the Western district. The Sunny Corner Silver mines in 1886 paid handsome dividends, and produced £160,000 worth of silver, but since that period the yield has largely fallen off.

The fields of the Western district of New South Wales have proved to be of immense value. The yield of silver in the Broken Hill and Silverton districts during 1896 was £1,754,515 ; while the machinery employed was valued at £929,300. The aggregate output of the mines in the Barrier country to the end of the year named was valued at £21,189,665. This rich silver-field, which was discovered in 1883 by Charles Rasp, a boundary rider on Mount Gipps Run, extends over 2,500 square miles of country, and has developed into one of the principal mining centres of the world. It is situated beyond the river Darling, and close to the boundary between New South Wales and South Australia. In the Barrier Range district the lodes occur in Silurian metamorphic micaceous schists, intruded by granite, porphyry,

and diorite, and traversed by numerous quartz reefs, some of which are gold bearing. The Broken Hill lode is the largest as yet discovered. It varies in width from 10 feet to 200 feet, and may be traced for several miles, the country having been taken up all along the line of the lode, and subdivided into numerous leases, held by mining companies and syndicates.

The Broken Hill Proprietary Company hold the premier position. They have erected on their lease a complete smelting plant on the latest and most approved principles, and have enlisted the services of competent managers whose experience has been gained in the celebrated silver-mining centres of the United States. From the commencement of mining operations in 1885 to the end of May, 1897, the company treated 3,299,331 tons of silver and silver-lead ores, producing 87,526,567 oz. of silver and 326,060 tons of lead, valued in the London market at £17,133,184. They have paid dividends and bonuses to the amount of £6,416,000, besides the nominal value of shares from the several "Blocks" sold to other companies. The sum spent in the erection and construction of plant from the opening of the property is about £750,000. The mine wages and salary sheet for the twelve months represented a sum of £407,315, including £79,056 paid to contractors, and £55,766 for quarrying. The net profit for the year was £300,120.

The quantity and value of silver and silver-lead ore exported by New South Wales to the end of 1896 is shown in the following table :—

Year.	Silver.		Silver-Lead.			Total value.
	Quantity.	Value.	Quantity.		Value.	
			Ore.	Metal.		
Up to 1882	oz. 765,397	£ 187,429	tons cwt. 203 12	tons cwt.	£ 5,385	£ 192,814
1883	77,066	16,488	105 17	.....	1,625	18,113
1884	93,660	19,780	4,668 1	.....	123,174	142,954
1885	794,174	159,187	2,095 16	190 8	107,626	266,813
1886	1,015,434	197,544	4,802 2	.....	294,485	492,029
1887	177,308	32,458	12,530 3	.....	541,952	574,410
1888	375,064	66,668	11,739 7	18,102 5	1,075,737	1,142,405
1889	416,895	72,001	46,965 9	34,579 17	1,899,197	1,971,198
1890	496,552	95,410	89,719 15	41,319 18	2,667,144	2,762,554
1891	729,590	134,850	92,383 11	55,396 3	3,484,739	3,619,589
1892	350,661	56,884	87,504 15	45,850 4	2,420,952	2,477,836
1893	531,972	78,131	155,859 1	58,401 3	2,953,589	3,031,720
1894	846,822	94,150	137,813 8	42,513 2	2,195,339	2,289,489
1895	550,142	81,858	190,192 19	29,687 0	1,560,813	1,642,671
1896	202,789	26,518	267,363 1	19,573 4	1,758,933	1,785,451
Total	7,423,526	1,319,356	1,103,946 17	345,613 4	21,090,690	22,410,046

This amount was approximately made up of 115,964,200 ounces of silver, valued at £17,196,800; and of 435,800 tons of lead, valued at £5,213,246. It will be seen that the production of silver in New South Wales rapidly increased until 1891, when it exceeded in value the largest annual production of gold, even in the palmiest days of the diggings. Since that year, however, as will be seen from the returns, the ore now being worked does not carry the same quantity of silver or lead as formerly, while a heavy fall in the price of the metal has considerably reduced the value of what has been won. The number of miners engaged in silver and lead mines in 1896 was 5,555, and the average value of mineral won by each miner engaged amounted to £321 8s. 3d., as compared with £352 13s. 1d. in 1895, £544 1s. 7d. in 1894, and £643 16s. 3d. in 1893.

A company has been formed in London for the purpose of acquiring the rights in New South Wales of a new process for the treatment of sulphide ores. Works have been constructed at Dapto, near Lake Illawarra, and it is intended to smelt refractory gold ores as well as silver ores. The machinery is capable of treating 200,000 tons yearly. Another company has erected at Cockle Creek, near Newcastle, electro-metallurgical works, which are giving employment to a large number of men. The process adopted at the Sulphide Corporation's works at Cockle Creek is that known as Ashcroft's, and is a most remarkable and interesting one. The capital of the company is £1,000,000; and the result of their operations will be watched with the very greatest interest.

Although indications of silver abound in all the other colonies, no fields of great importance have yet been discovered, the value of the yield of Australasia to the end of 1896, exclusive of that of New South Wales, being only £2,854,641. Next to New South Wales as a silver-producing province, but far from the position occupied by the former colony, stands Tasmania, where the industry has been steadily developed during the last five years. In 1896 the quantity of ore exported was 20,817 tons, valued at £222,948. In the Mount Zeehan and Dundas districts almost the whole quantity produced in the colony is obtained. In the first-named district argentiferous lead ore has been found over 30 square miles of country; and the Mount Dundas field, almost adjoining, extends north as far as the Pieman River. Five years ago smelting works were erected on the Mount Zeehan field, but the mines were not then sufficiently developed to keep them at work. It is expected, however, that another effort in this direction will be made at an early date. At the present time most of the ore is sold to agents of the Australian and German smelting works, although a few companies ship direct. The principal mine at Mount Zeehan is the Western, which has yielded about 25,000 tons of ore, valued at £300,000, and paid nearly £85,000 in dividends. A little mining is carried on at the Whyte River and Hazlewood fields; and at the Magnet Range, near Waratah, high-class ore is being opened up.

Silver is found in various districts in Queensland, but the greatest activity is at present being shown at Stanthorpe, on the border of New South Wales, and it is from this field that the largest proportion of the production of that colony was raised in 1896. In that year the production was valued at £32,162, and the industry gave employment to 40 miners. In New Zealand silver is found in various localities, principally on the Te Aroha, Thames, and Coromandel fields, but the metal is generally sought in conjunction with gold-mining. The production of the colony during the year 1896 was 94,307 ounces, valued at £10,589.

There are no silver-mines in Victoria or Western Australia, the small amount of silver produced by the former colony being found associated with gold. The quantity of silver extracted from gold during 1896 at the Melbourne Branch of the Royal Mint was 52,975 ounces. Prospecting for silver ores is now being carried on at Deddick, East Gippsland, Victoria. The production of silver in South Australia is very limited, and it would seem that the argentiferous lead-ore fields of Broken Hill and Silverton, which are almost on the border of the two colonies, are exclusively confined within the boundaries of New South Wales. In 1896 a small quantity of silver, valued at £194, was obtained in the province proper; and 20 tons of silver ore, valued at £1,250, were exported from the Northern Territory. This was obtained from workings near the McKinley and Mount Wells leases.

Up to the end of 1896 New South Wales had produced nearly 89 per cent. of the total value of silver raised in Australasia; Tasmania came second, with 4·3 per cent.; and the remaining small proportion was distributed over the other colonies, Victoria claiming the largest share. The total production of silver in Australasia in 1896, and up to the end of that year, was as follows:—

Colony.	During 1896.		To end of year 1896.	
	Value.	Proportion raised in each Colony.	Value.	Proportion raised in each Colony.
	£	per cent.	£	per cent.
New South Wales ...	1,785,451	86·7	22,410,046	88·7
Victoria	7,158	0·3	827,981	3·3
Queensland	32,162	1·6	661,715	2·6
South Australia	1,444	0·1	103,171	0·4
Western Australia ...	.....	.....	250	0·0
Tasmania	222,948	10·8	1,079,672	4·3
New Zealand	10,589	0·5	181,852	0·7
Australasia	2,059,752	100·0	25,264,687	100·0

The world's production of silver during the ten years ended 1896 is estimated to have been as follows:—

Year.	Ounces.	Year.	Ounces.
1887	96,124,000	1892	152,940,000
1888	108,827,000	1893	162,162,000
1889	120,214,000	1894	167,354,000
1890	126,095,000	1895	169,356,000
1891	137,171,000	1896	158,189,000

The annual output of the colony of New South Wales alone is therefore rather more than one-twelfth of the total production of silver.

Copper.

Copper is known to exist in all the colonies, and has been mined for extensively in South Australia, and on a much smaller scale in New South Wales and Queensland. The low quotations which have ruled for a number of years have had a depressing effect upon the industry, and for some time a few of the mines were closed; but with a consumption which has lately shown a tendency to overtake production, and a gradual rise in the price of the metal, copper-mining is again attracting considerable attention in Australasia. South Australia has so far supplied over three-fourths of the copper produced in these colonies; but Tasmania promises to become a formidable competitor in the output of this mineral. In Tasmania deposits were worked on a limited scale for a long number of years; but the discovery of a rich belt of copper-bearing country, extending from Mount Lyell past Mount Tyndall, Mount Read, Mount Murchison, and north of the Pieman to the Rocky and Savage Rivers, has completely changed the character of the mining industry in the colony, and from a small export of copper ore valued at £1,659 in 1896, the production in 1897 had become the largest in Australasia. This expansion was chiefly due to the enterprise shown by the Mount Lyell Mining and Railway Company, whose mine is situated at Gormanston, about 4 miles by road from Queenstown. At the latter place reduction works have been erected, where the ore is treated by the pyritic smelting process, ultimately being converted into blister copper, containing about 98 per cent. of metallic copper. From the reduction works a railway has been laid down to Teapookana, on the King River, through most difficult country. It is stated that a sum of £400,000 was expended by the Company on construction and development works before any return was received from the mine; but by the end of the first quarter of 1898 the dividends had amounted to £145,000. Over 2,400 men find employment with the Company. It is estimated that there are 4½ million tons of ore in sight, of an average value of 4·5 per cent. copper, 3 oz.

silver, and 0·125 oz. gold per ton. Other mines on the same field are at work, and in various parts of the colony copper-mining is receiving attention. In 1897 the copper ore and metal exported were valued at £323,650, making the total mineral production of Tasmania for the year nearly a million sterling. In the previous year only sixteen men were employed in mining copper in the colony.

The discovery of copper had a marked effect upon the fortunes of South Australia at a time when the young and struggling colony was surrounded by difficulties. The first important mine, the Kapunda, was opened up in 1842. It is estimated that at one time 2,000 tons were produced annually, but the mine was closed in 1879. In 1845 the celebrated Burra Burra mine was discovered. This mine proved to be very rich, and paid £800,000 in dividends to the original owners. For a number of years, however, the mine has been suffered to remain unworked, chiefly because the deposits originally worked were found to be depleted. For many years the average yield was from 10,000 to 13,000 tons of ore, yielding from 22 to 23 per cent. of copper. For the period of thirty years during which the mine was worked the output of ore amounted to 234,648 tons, equal to 51,622 tons of copper, valued at £4,749,224. With the object of discovering whether ore exists at depths in the mine, boring operations are now in progress. A depth of 500 feet has been reached, and the prospects are regarded as satisfactory. The Wallaroo and Moonta mines, discovered in 1860 and 1861, proved to be even more valuable than the Burra Burra, the Moonta mine employing at one time upwards of 1,600 hands. At the Wallaroo mines in 1896 the quantity of ore raised amounted to 16,274 tons, yielding 2,226 tons of fine copper; while in 1897 the production was set down at 17,102 tons, yielding 2,136 tons of fine copper, the percentage of metal being lower than in the previous year. In 1896 the Moonta mines had an output of 13,543 tons of ore, from which 2,575 tons of fine copper were obtained; and in 1897, 15,688 tons of ore, yielding 2,937 tons of copper. The cost of producing the copper in 1897, after adding shipping and interest charges and Adelaide expenses, was £47 14s. 1d. per ton. The total dividends paid by these mines is stated to be upwards of £1,700,000. The production of copper in South Australia is again improving, and was greater in 1895 and 1896 than during the previous three years.

The copper-mining industry in New South Wales reached its highest point in 1883, when the production was valued at £472,982. The low price to which the metal fell greatly diminished the production, some of the principal mines being closed for a few years; but, as in the other colonies, there has lately been a revival in the industry. In 1896 the output was valued at £197,814, and 810 men were employed in the mines. The principal deposits of copper are found in the central part of the colony, between the Macquarie, Bogan, and Darling Rivers. Deposits have also been found in the New England and Southern districts, as well as at Broken Hill, showing that the mineral is widely

distributed throughout the colony. The more important mines are those of Cobar, where the Great Cobar mine, which recommenced work on tribute early in 1894, raised in the following year 37,845 tons of ore, yielding 1,703 tons of smelted copper; and, in 1896, 66,431 tons of ore, yielding 2,650 tons of smelted copper, valued at £107,200. It may be mentioned that the copper extracted from this mine is found to contain gold more than sufficient to pay for mining and treating the ore. The syndicate to whom the mines belong now give employment to 450 men. The Nymagee Copper-mine, which has been acquired by the Great Cobar Syndicate, raised 3,249 tons of ore, yielding 380 tons of smelted copper, valued at £17,948. The Burraga Company produced 4,241 tons of refined copper in 1896, valued at £19,928; 150 men find constant employment at their mines. The production of the Mount Hope Copper Company was 1,092 tons of ore, yielding 141 tons of refined copper; while at South Mount Hope another company raised 454 tons of ore, the refined copper obtained amounting to 55 tons. In other districts considerable activity is also being displayed. It may be mentioned that the Broken Hill Proprietary Company saved copper to the value of £29,070 in the course of their operations during the year.

Cupriferous deposits abound in Queensland, and at one time there was considerable speculation in copper-mining stock of that colony. Peak Downs and Mount Perry acquired great celebrity in the Australian mining market, but afterwards suffered reactionary depression, and were ultimately abandoned—the result, in a large measure, of over-speculation. In Northern Queensland copper is found throughout the Cloncurry district, in the upper basin of the Star River, and the Herberton district. The returns from the copper-fields in the colony are at present small, owing to the lack of suitable fuel for smelting purposes, which renders the economic treatment of the ore difficult; and the development of the mines is greatly retarded by the want of easy and cheaper communication with the coast; but it is expected that these disabilities will be overcome at no distant date, and a revival of the industry is hoped for, as some of the abandoned fields contain very extensive deposits of copper-ore. The total production of copper in Queensland during 1896 was valued at £21,042, as compared with £13,097 in 1895 and £9,582 in 1894.

In Western Australia copper deposits have been worked for some years. Very rich lodes of the metal have been found in the Northampton, Murchison, and Champion Bay districts, and also in the country to the south of these districts on the Irwin River. The industry, however, is not very active at present, although it shows a tendency to revive. In 1896, 25 claims were taken up in the West Pilbarra and Northampton district. The most important workings are at Whim Creek Mine, on the Balla Balla Creek, near Roeburne. To the end of that year, the total export of copper was valued at £166,816.

Copper-mining has not attained any great proportions in Victoria, although deposits have been found in several parts of the colony,

particularly in the Beechworth district, where they have been traced over an area of some 50 square miles. The total production to date is valued at £206,395. There was no output in 1896. The copper deposits of New Zealand have been worked to a small extent only, and for a few years have been entirely neglected.

Copper is sometimes found in the Australasian mines in a virgin state, and beautiful specimens of the pure metal have been exhibited at different times, but it occurs generally in the form of oxidised copper ores, carbonates, sulphates, phosphates, and silicates of copper. The museums of South Australia, Victoria, and New South Wales contain striking samples of azurite and malachite, magnificent blocks of which have been shown from time to time at exhibitions, not only in the colonies, but also in Europe and America. Copper sulphides and arsenides of copper are generally found in deep sinkings. The metal has also been found associated with tin in the form of stannine.

In 1896 the number of men employed in copper-mining in New South Wales was 810, as compared with 868 in 1895, 645 in 1894, and 283 in 1893. Only a few hands were employed in the other colonies, except South Australia, where the number must have amounted to about 2,000. In 1897 the industry afforded employment to a large number of men in Tasmania.

The total value of copper produced in Australasia during and up to the end of 1896, and the proportion furnished by each colony, are given below :—

Colony.	During 1896.		To end of year 1896.	
	Value.	Proportion raised in each Colony.	Value.	Proportion raised in each Colony.
	£	per cent.	£	per cent.
New South Wales	197,814	44·7	4,068,169	14·7
Victoria	.....	.....	206,395	0·7
Queensland	21,042	4·7	2,008,116	7·3
South Australia	222,202	50·2	21,037,972	76·0
Western Australia	100	....	166,816	0·6
Tasmania	1,659	0·4	168,226	0·6
New Zealand	.....	....	17,866	0·1
Australasia	442,817	100·0	27,673,560	100·0

In June, 1872, copper realised as much as £112 per ton, whilst in December, 1886, the lowest price on record until that time was touched, and only £44 could be obtained for South Australian copper. At the end of 1887 the price had risen to £70 per ton, and in September, 1888, to £93. In March, 1889, there was a great fall in the price of the metal, and in April of that year the quotation in London was as low as £43 per ton. This was the lowest price reached until June, 1894, when

it fell to £41 10s. From that date there was an upward movement, and at the close of 1896 the London price of copper stood at £52 10s. per ton. Reference has already been made to the depressing influence exerted on the industry in Australasia by the low prices; but, as previously indicated, the tendency of consumption to increase in a greater ratio than production, and the rise in the price of the metal, has galvanised copper-mining into a state of activity which has not been witnessed for several years.

Tin.

Tin was known to exist in Australasia almost from the first years of colonisation, the earliest mention of the mineral appearing in a report of a discovery by Surgeon Bass on the north coast of Tasmania. In the form of cassiterite (oxide of tin) it occurs in all the colonies, but the richest deposits have been found in Tasmania—the Mount Bischoff being the most celebrated tin-mine in Australasia. The wealth of Queensland and the Northern Territory of South Australia in this mineral, according to the reports of Mr. Jack, the Government Geologist of the former colony, and the late Rev. Tenison Woods, appears to be very great.

In New South Wales lode tin occurs principally in the granite and stream tin under the basaltic country in the extreme north of the colony, at Tenterfield, Emmaville, Tingha, and in other districts of New England. The metal has also been discovered in the Barrier Ranges, at Poolamacca and Euriowie; near Bombala in the Monaro district; at Gundle, near Kempsey; at Jingellic, on the Upper Murray; at Dora Dora, on the Upper Murray; and in the Valley of the Lachlan; but in none of these districts has it been worked to any extent. Although the mineral was discovered by the Rev. W. B. Clarke as far back as the year 1853, yet the opening of the tin-fields of New South Wales only took place in the year 1872, but since that date the output from the mines has been considerable. In 1881 the industry attained its greatest height of prosperity, the export having increased to £568,795 from £249,779 in 1876. In 1882 the production was but £27,000 less; but after that year, owing to protracted dry seasons, which in many cases prevented mining operations, combined with the comparatively low price which the metal brought, the value of the output fell considerably. Another cause of diminished production is that the shallow deposits of stream tin have to a great extent been exhausted, although the deep deposits and the tin-lodes have as yet scarcely been touched, nearly all the metal hitherto produced having been taken from alluvial deposits. The principal lodes worked during 1896 were the Vegetable Creek Tin-field, near Emmaville; at Tent Hill; at the Mann River, near Glen Innes; at Wilson's Downfall; and at Tingha. In that year the production was valued at £68,546, and the industry gave employment to 1,419 men, of whom 491 were Chinese.

Tasmania has been the largest producer of tin in Australasia. As in New South Wales, a very large proportion of the tin hitherto produced has been from alluvial deposits, the lodes, except at the Mount Bischoff mine, having been comparatively neglected. There are considerable areas of alluvial tin ground in the eastern and north-eastern divisions of the colony; but the output is not so great as formerly, owing to the low price of the metal and the scarcity of water. Extensive deposits are known to exist in the north-eastern district, and a slight rise in value and a plentiful supply of water would result in a greatly increased production. The Mount Bischoff mine, which is worked as an open quarry, is the largest producer of tin in the colony, and has paid nearly £1,500,000 in dividends. The company have erected smelting works at Launceston, where most of the tin ore raised in the island is treated. In the Blue Tier district, plant has been erected and other preparations made for working the low-grade ores found there; and operations have lately been resumed in the Ben Lomond district. The lodes in the vicinity of Mount Heemskirk and North Dundas, on the west coast, have, however, been comparatively neglected, the present price of the metal rendering mining operations there unprofitable. In 1896 the number of tin-miners in the colony was 1,009, and the production was valued at £159,038, or only half that of ten years before.

The most important tin-mines in Queensland are in the Herberton district, south-west of Cairns; at Cooktown, on the Annan and Bloomfield Rivers; and at Stanthorpe, on the border of New South Wales. The Herberton is the chief tin-mining centre of Queensland, and the output for 1896 was valued at £31,770. The tin in this district is chiefly obtained from lodes. Herberton and Stanthorpe have produced more than three-fourths of the total production of the colony. During the past few years the production has greatly decreased in consequence of the low price of the metal; but with a rise in values, and more economic treatment of the ores than is the case at present, the industry should have a great future.

The yield of tin in Victoria is very small, and until lately no fields of importance had been discovered, but towards the latter end of 1890 extensive deposits were reported to exist in the Gippsland district at Omeo and Tarwin. In 1896 only 45 tons of tin, valued at £1,799, were produced. This was chiefly obtained from auriferous wash dirt at Eldorado, and from sluicing operations at Koetong and Cudgewa. In South Australia tin-mining is unimportant. During 1896 a small quantity of 14 tons, valued at £530, was exported from Port Darwin, in the Northern Territory. In Western Australia the tin-fields are situated at Greenbushes; but the industry, owing to the low price of the metal, and the attraction exerted on capital by the gold-fields, is not in a flourishing condition. During 1896 the production in the colony amounted to 137 tons of ore, valued at £4,338. There is no record of any production of tin in New Zealand.

The tin-mining industry has been subject to frequent fluctuations, especially of late years. The value of the metal in the European market was £159 per ton in 1872, £52 in 1878, £114 in 1880 and 1882, and £72 in 1884. A gradual recovery then took place, until in 1888 the price reached £121; but since that time there has been an almost continuous fall, and in 1896 the London quotations were only £59 12s. 4d. to £60 14s. per ton—prices which have had a depressing effect upon the industry.

The value of the production of tin during 1896, and up to the end of that year, was as given below :—

Colony.	During 1896.		To end of year 1896.	
	Value.	Proportion raised in each Colony.	Value.	Proportion raised in each Colony.
	£	per cent.	£	per cent.
New South Wales	68,546	24·2	6,196,518	34·9
Victoria	1,799	0·6	689,537	3·9
Queensland	49,018	17·3	4,374,789	24·7
South Australia	530	0·2	26,012	0·1
Western Australia	4,338	1·5	70,192	0·4
Tasmania	159,038	56·2	6,387,554	36·0
Australasia	283,269	100·0	17,744,602	100·0

The number of persons engaged in tin-mining in 1896 was as follows :—In New South Wales, 1,419; Tasmania, 1,009; Queensland, 508; Victoria, 20; and Western Australia, 60.

Iron.

Iron is distributed throughout Australasia, but for want of capital in developing the fields this industry has not progressed. In New South Wales there are, together with coal and limestone in unlimited supply, important deposits of rich iron-ores suitable for smelting purposes; and for the manufacture of steel of certain descriptions abundance of manganese, chrome, and tungsten ores are available. The most extensive fields are in the Mittagong, Wallerawang, and Rylstone districts, which are roughly estimated to contain in the aggregate 12,944,000 tons of ore, containing 5,853,000 tons of metallic iron.

Magnetite, or magnetic iron, the richest of all iron ores, is found in abundance near Wallerawang in New South Wales. The proximity of coal-beds now being worked should accelerate the development of the iron deposits, which contain 41 per cent. of metal. Magnetite occurs in

great abundance in Western Australia, together with hematite, which would be of enormous value if cheap labour were abundant.

Goethite, limonite, and hematite are found in New South Wales, at the junction of the Hawkesbury sandstone formation and the Wianamatta shale, near Nattai, and are enhanced in value by their proximity to coal-beds. Near Lithgow extensive deposits of limonite or clay-band ore are interbedded with coal. Siderite or spathic iron (carbonate of iron) and vivianite (phosphate of iron) are found in New Zealand. The latter also occurs in New South Wales, intermingled with copper and tin ores.

The principal works in New South Wales for the manufacture of iron from the ore are situated at Eskbank, near Lithgow, where red siliceous ores, averaging 22 per cent., and brown hematite, yielding 50 per cent., metallic iron, have been successfully treated. Abundance of coal and limestone are found in the neighbourhood. This establishment, however, has for some time abandoned the manufacture of pig-iron, for which it was originally built. The work now carried on consists of the re-rolling of old rails, and the manufacture of iron bars, rods, and nails, and of ordinary castings. The quantity manufactured from scrap during 1896 was 4,721 tons, valued at £33,283. A successful attempt has been made at Mittagong to make gas-pipes, etc., from iron smelted from the ore, and taken direct to the mould, without first making it into pig-iron. Some years ago the iron smelting works at Fitzroy, Mittagong, were established, but after producing a considerable quantity of pig-iron the operations were discontinued. Some samples of ore, coal, and limestone obtained in this district, with pig-iron and castings manufactured therefrom, were exhibited at the late Mining Exhibition in London, and obtained a first award. Iron ore is raised in some places in the colony, but is used chiefly for the purpose of flux.

During the year 1893, the Parliament of New South Wales agreed to a resolution for the manufacture of 30,000 tons of iron piping in the colony, and portions of the work have since been let by tender as opportunity offered. A further order for £75,000 worth of iron pipes was placed by the Government with local firms, in November, 1897. In 1896 tenders were called by the Government for the supply of 150,000 tons of steel rails, with the necessary quantities of fish-plates fish-bolts, and spikes, to be manufactured in New South Wales, from iron ore and other necessary minerals produced in the colony. The tenders closed on the 30th December of that year. The specification provided for the delivery of 15,000 per annum, in equal monthly quantities, the first delivery to take place not later than eighteen months after the signing of the contract. One of the offers received was accepted.

In Tasmania, where large deposits of pure red and brown hematite are known to exist, a commencement has been made in the production of iron ore. In 1896, 200 tons of ore, valued at £50, were raised; and in the following year 894 tons of iron ore, of a declared value of £812,

were exported; while for the first quarter of 1898 the shipments comprised 548 tons, valued at £1 per ton. The Government of South Australia has offered a bonus of £2,000 for the first 500 tons of pig-iron produced in that colony.

Sulphuretted iron ores (pyrites) are of little intrinsic value, but are frequently of considerable worth on account of the other minerals with which they are associated, common pyrites being often auriferous. Mispickel differs from other pyrites inasmuch as it contains arsenic, and sometimes gold and silver, and is frequently associated with tin and copper ores; but the extraction of gold is rendered difficult on account of the presence of the arsenic. These minerals (pyrites) are common to all the colonies.

Antimony.

Antimony is widely diffused throughout Australasia, and is sometimes found associated with gold. In New South Wales, deposits of antimony occur in various places, chiefly in the Armidale, Bathurst, and Rylstone districts; and at Bowraville on the North Coast. The principal centre of this industry is at Hillgrove, near Armidale, where the Eleanora Mine, one of the richest in the colony, is situated. The ore is also worked for gold. The results of a number of analyses, made by the authorities of the Geological Museum, show from 29·57 to 79·45 per cent. of metal; but, notwithstanding these encouraging assays, the price has not been sufficiently high to tempt Australian producers. A considerable quantity of antimony was raised some years ago at the Corangula mines, in the Macleay district, but these mines are at present idle. Lodes have also been opened and partly worked near Nambucca, Drake, Gulgong, and Razorback. The value of antimony raised during 1896 was £1,834, and up to the end of that year, £183,399. With the exception of 30 tons, valued at £200, raised at Bowraville, the production in 1896 was obtained at Hillgrove. The industry has suffered greatly during the last two years from the low price of the metal, and the output is not likely to improve until the price takes an upward tendency.

In Victoria there has been a still greater falling off in the production of antimony; for from a state of activity in 1890 which gave employment to 238 miners, in 1896 the industry was absolutely at a standstill. In Queensland the fields were all showing development in 1891, when the output exhibited a very large increase compared with that of former years; but, as in the case of Victoria, the production of the metal seems to have ceased. In New Zealand very little antimony ore was obtained during the year 1896, the quantity exported from that colony being only 21 tons, valued at £450. Good lodes of stibnite (sulphide of antimony) have been found near Roebourne, in Western Australia; but no attempt has yet been made to work them.

The following table shows the value of antimony produced in Australasia up to the end of 1896 :—

Colony.	Value.	Proportion raised in each colony.
	£	per cent.
New South Wales	183,399	41·0
Victoria	176,644	39·5
Queensland	34,958	7·8
New Zealand	52,204	11·7
Australasia	447,205	100·0

Bismuth.

Bismuth is known to exist in all the Australian colonies, but up to the present time it has been mined for in New South Wales, Queensland, South Australia, and Tasmania only. It is usually found in association with tin and other minerals, but in one instance a mass of native bismuth, weighing 30 lb., was found in New South Wales. The principal mine in the mother colony is situated at Kingsgate, in the New England district, where the mineral is generally associated with molybdenum and gold; this mine, however, is at present practically closed. The value of bismuth produced up to the end of 1896 in New South Wales and Queensland was £38,212 and £57,535 respectively. In the former colony the production in 1896 was valued at £490 only, while in Queensland there was no output in that year. In Tasmania a company has been formed to work the bismuth deposits at Bell Mount. The lodes are opening up satisfactorily, and a small quantity of ore has been sent away.

Manganese.

Manganese probably exists in all the colonies, deposits having been found in New South Wales, Victoria, Queensland, New Zealand, and Western Australia—the richest specimens in New South Wales and New Zealand. Little, however, has been done to utilise the deposits, the demands of the colonial markets being extremely limited; but in the event of the extensive iron ores of New South Wales being worked on a large scale, the manganese, plentiful as it is in that colony, will become of commercial importance. The ore generally occurs in the form of oxides, manganite, and pyrolusite, and contains a high percentage of sesquioxide of manganese. The production of manganese in New Zealand to the end of the year 1896 was valued at £57,993. In that colony the output has shrunk to insignificant proportions, being valued in 1896 at £205. In Queensland during the same year, 300 tons, valued at £900, were raised; but in New South Wales nothing was produced in the course of the twelve months.

Platinum.

Platinum and the allied compound metal Iridosmine have been found in New South Wales, but so far in inconsiderable quantities, the latter occurring commonly with gold or tin in alluvial drifts. It is believed that the beach deposits at Ballina and other places on the northern coast might, with improved appliances, be profitably worked for platinum. Fifteen cwt. of sand from this district were forwarded in 1891 to platinum merchants in London for treatment. The tests made proved, however, that the small percentage of metal found and the cost of extraction barely leave a margin of profit. On the northern beaches, a little platinum is being obtained by the miners who are working the black sand for gold. The metal has also been discovered at Fifield, in the Parkes district, and in lodes near Broken Hill and Orange. At Fifield, 2,900 oz. were saved in the course of the gold-washing operations during the year 1896. The Fifield platinum occurs in coarse shotty grains, and is much purer than that obtained from the northern beach-sands. The quantity of platinum exported during 1896 was 3,438 oz., valued at £3,479. Platinum and Iridosmine have also been found in New Zealand.

Tellurium.

The noble metal Tellurium has been found in New Zealand, associated with gold and silver (petzite) and with silver only (hessite). It has also been discovered in New South Wales at Bingara and other parts of the northern districts, as well as at Tarana, on the Western Line, though at present only in such minute quantities as would not repay the cost of working; while at Captain's Flat it has been found in association with bismuth.

At many of the mines at Kalgoorlie, Western Australia, large quantities of ores of telluride of gold have been discovered in the lode formations. The Government of the colony have arranged with a private company for the erection of smelting works on the Swan River, near Fremantle.

Lead.

Lead is found in each of the Australasian colonies, but is worked only when associated with silver. In Western Australia the lead occurs in the form of sulphides and carbonates of great richness, but the quantity of silver mixed with it is very small. The lodes are most frequently of great size, containing huge masses of galena, and contain so little gangue that the ore can be very easily dressed to 83 or 84 per cent. The Government having offered £10,000 for the first 10,000 tons of lead smelted in the colony, works were erected for this purpose, but the operations of the company were not successful, and the works were closed. Since 1845 Western Australia has exported 33,939 tons of lead ore, valued at £370,154. The chief mining centres for this mineral are

in the Northampton district, between Geraldton and Murchison, but nothing was raised in 1896. As will be gathered from the remarks on silver, the association of lead with this metal is the Broken Hill mines of New South Wales adds very greatly to the value of the product. Up to the end of 1896 the quantity of lead in the ores raised is estimated to have been 435,800 tons.

Other Metals.

Mercury, in the form of sulphides or cinnabar, is found in New South Wales, Queensland, and New Zealand. In New South Wales, in the form of cinnabar, it has been discovered on the Cudgegong River, near Rylstone, and it also occurs at Bingara, Solferino, Yulgilbar, and Cooma. In the latter place the assays of ore yielded 22 per cent. of mercury. Very large and rich deposits have been found on Noggriga Creek, near Yulgilbar, and three 40-acre blocks have been taken up. Cinnabar leases have also been applied for in the Bingara district.

Titanium, of the varieties known as octahedrite and brookite, is found in alluvial deposits in New South Wales, in conjunction with diamonds.

Wolfram (tungstate of iron and manganese) occurs in some of the colonies, notably in New South Wales, Victoria, Queensland, and New Zealand. In 1896 Queensland produced 3 tons, valued at £60. A few years ago the production was considerably larger. Scheelite, another variety of tungsten, is also found in the last-mentioned colony. Molybdenum, in the form of molybdenite (sulphide of molybdenum), is found in New South Wales and Victoria, associated in the former colony with tin or bismuth in quartz-reefs.

Zinc ores, in the several varieties of carbonates, silicates, oxide, sulphide, and sulphate of zinc, have been found in several of the Australasian colonies, but have attracted little attention.

Nickel, so abundant in the island of New Caledonia, has up to the present been found in none of the Australasian colonies except Queensland and Tasmania; but few attempts have been made to prospect systematically for this valuable mineral. In 1894 Tasmania produced 136 tons of nickel ore, valued at £544; but nothing has been raised since that date.

Cobalt occurs in New South Wales and Victoria, and efforts have been made in the former colony to treat the ore, the metal having a high commercial value; but the market is small, and no attempt has yet been made to produce it on any large scale. The manganese ores of the Bathurst district of New South Wales often contain a small percentage of cobalt—sufficient, indeed, to warrant further attempts in this direction.

Chrome iron or chrome ore has been found in New Zealand and Tasmania. In New South Wales chromium is found in the northern portion of the colony in the Clarence and Tamworth districts, and also near Gundagai. It is usually associated with serpentine. In the

Gundagai district the industry was rapidly becoming a valuable one, but the low price of chrome has greatly restricted the output. During 1896 the production reached 1,000 tons, valued at £3,000. The exports of chrome ore during the year amounted to £11,280. In New Zealand chrome ore to the value of £37,367 was extracted between 1858 and 1866, but nothing has been done since.

Sulphur exists in large quantities in the volcanic regions of New Zealand, where it will doubtless some day become an article of commerce. It is also said to occur in small quantities at Mount Wingen, in the Upper Hunter district of New South Wales; and also at Tarcutta, near Wagga Wagga; and at Louisa Creek, near Mudgee, in that colony.

Arsenic, in its well-known and beautiful forms, orpiment and realgar, is found in New South Wales and Victoria. It usually occurs in association with other minerals, in veins.

Coal.

The Australasian colonies have been bountifully supplied by Nature with mineral fuel. Five distinct varieties of black coal, of well characterised types, may be distinguished, and these, with the two extremes of brown coal or lignite, and anthracite, form a perfectly continuous series. For statistical purposes, however, they are all included under the generic name of "coal," and therefore these minerals will be considered here only under the three main heads—lignite, coal, and anthracite.

Brown coal or lignite occurs principally in the colonies of New Zealand and Victoria. Attempts have frequently been made to use the mineral for ordinary fuel purposes, but its inferior quality has prevented its general use. In Victoria, during 1896, 4,675 tons of brown coal were raised, valued at £1,899; and 1,140 tons of lignite, valued at £242. The fields of lignite in New Zealand are roughly estimated to contain about 500 million tons; and a small quantity is raised annually.

Black coal forms one of the principal mineral resources of New South Wales; and in New Zealand and other colonies the rich deposits of this valuable substance are rapidly being developed. That they will form an important source of commercial prosperity cannot be doubted, as the known areas of the coal-fields of this class have been roughly estimated to contain about 500 million tons of coal in New Zealand, and 78,198 million tons in New South Wales. New Zealand also possesses a superior quality of bituminous coal, which is found on the west coast of the Middle Island. An estimate of the probable contents of these coal-fields is given as 200 million tons. Coal of a very fair description was discovered in the basin of the Irwin River, in Western Australia, as far back as the year 1846. It has been ascertained from recent explorations that the area of carboniferous formation in that colony extends from the Irwin northwards to the Gascoyne River, about 300 miles distant, and probably all the way to the Kimberley district. The

most important discovery of coal in the colony so far is that made in the bed of the Collie River, near Bunbury, to the south of Perth. The coal has been tested and found to be of good quality; and there are grounds for supposing that there are 250 million tons on this field. Mr. Jack, the Government Geologist of Queensland, considers the extent of the coal-fields of that colony to be practically unlimited, and is of opinion that the carboniferous formations extend to a considerable distance under the Great Western Plains. It is roughly estimated that the coal measures at present practically explored extend over an area of about 24,000 square miles. In Tasmania and Victoria large deposits of coal have also been found; and in all the colonies named the industry is being prosecuted with vigour.

Coal was first discovered in New South Wales in the year 1797, near Mount Keira, by a man named Clark, the supercargo of a vessel called the Sydney Cove which had been wrecked in Bass Straits. Later in the same year Lieutenant Shortland discovered the river Hunter, with the coal-beds situated at its mouth. Little or no use, however, was made of the discovery, and in 1826 the Australian Agricultural Company obtained a grant of 1,000,000 acres of land, together with the sole right, conferred upon them by charter, of working the coal-seams that were known to exist in the Hunter River district. Although the company held this valuable privilege for twenty years, very little enterprise was exhibited by them in the direction of winning coal, and it was not until the year 1847, when their monopoly ceased and public competition stepped in, that the coal-mining industry began to show signs of progress and prosperity. From the 40,732 tons extracted in 1847, the quantity raised had in 1891 expanded to the large figure of 4,037,929 tons, valued at £1,742,796. This is the largest output ever reached in a single year. In 1892 the production fell to 3,780,968 tons, valued at £1,462,388; while in 1893 there was a further fall to 3,278,328 tons, valued at £1,171,722; but in 1894 the production again took an upward tendency, and in 1895 stood at 3,738,589 tons, of a value of £1,095,327; and in 1896, 3,909,517 tons, valued at £1,125,281. Although the quantity extracted in 1896 has only been exceeded in 1891, the fall in prices has placed the value below that of every year since 1882, with the exception of 1895. To the end of 1896, the total quantity of coal extracted from the New South Wales mines, from their opening in the early years of the century, amounted to 72,282,266 tons, valued at £31,819,331.

The coal-fields of New South Wales are situated in three distinct regions—the Northern, Southern, and Western districts. The first of these comprises chiefly the mines of the Hunter River districts; the second includes the Illawarra district and, generally, the coastal regions to the south of Sydney, together with Berrima, on the table-land; and the third consists of the mountainous regions on the Great Western Railway, and extends as far as Dubbo. The total area of the carboniferous strata of New South Wales is estimated at 23,950 square miles. The seams

vary in thickness. One of the richest has been found at Greta, in the Hunter River district; it contains an average thickness of 41 feet of clean coal, and the quantity underlying each acre of ground has been computed to be 63,700 tons.

The number of coal-mines under inspection in New South Wales at the end of the year 1896 was 96, as compared with 93 in the previous year. They gave employment to 9,233 persons, of whom 7,538 were employed under ground, and 1,695 above ground. The average quantity of coal extracted per miner was 519 tons, as against an average of 503 tons in the previous year, and 492 tons in 1894. For the ten years ended 1896, the average quantity of coal extracted per miner was 447 tons, which, at the mean price of coal at the pit's mouth, was equivalent to £170 19s. 6d. Taking all persons employed at the mines, both above and under ground, the average for the ten years would be 364 tons, equivalent to £139 2s. 7d. per man. This production is certainly large, and compares favourably with the results exhibited by the principal coal-raising countries of the world, as will be evident from the following figures, giving the averages for the leading countries, based on the number of persons employed :—

Country.	Quantity of coal raised per miner.	Value at the pit's mouth per ton.	Total value of coal raised per miner.
	tons.	s. d.	£ s. d.
New South Wales	364	7 8	139 2 7
Great Britain	310	6 4	98 4 3
United States	447	5 4	118 16 3
Germany	267	6 4	84 7 0
France	202	8 7	86 15 0
Belgium	173	8 0	69 4 6
Austria	203	5 6	56 4 9

New South Wales is its own chief customer. In 1896, out of a total production of 3,909,517 tons, the consumption amounted to 1,434,610 tons, or nearly 36·7 per cent. The colony of Victoria took the next largest share of the output, viz., 714,666 tons, or 29 per cent. of a total export of 2,474,907 tons. The quantity of coal required for local consumption shows a satisfactory increase during most years. The annual consumption per head increased from 16 cwt. in 1877 to 22 cwt. in 1896. The larger use of steam for railway locomotives and for manufacturing and other purposes, as well as the multiplication of gas-works, accounts for a great portion of the increase; but it must also be borne in mind that there is a large and growing demand for bunker coal for ocean-going steamers, which appears not as an export, but as required for home consumption. The amount of coal taken by the steamers during 1896 was about 350,000 tons.

The progress of the export trade of New South Wales, from 1881 to 1896, is shown in the following table:—

Exported to—	Quantity.			Value.		
	1881.	1891.	1896.	1881.	1891.	1896.
	tons.	tons.	tons.	£	£	£
Australasian colonies	657,135	1,510,976	1,371,796	255,572	755,509	482,096
India, Ceylon, and China	136,511	188,000	97,238	59,944	105,208	36,497
Mauritius	6,249	19,760	8,466	2,414	10,813	3,228
Pacific Islands	19,526	141,055	99,483	8,011	75,803	37,215
United States	150,002	365,623	303,726	68,172	200,851	119,920
South America	8,017	221,700	376,626	3,243	123,136	139,781
Other countries	52,404	67,254	217,572	20,174	35,310	81,527
Total	1,029,844	2,514,368	2,474,907	417,530	1,306,630	900,264

New Zealand is the only other colony in a position to export coal. Its export trade in 1881, 1891, and 1896 was as follows:—

Exported to—	Quantity.			Value.		
	1881.	1891.	1896.	1881.	1891.	1896.
	tons.	tons.	tons.	£	£	£
Australasian colonies	6,049	14,277	4,132	5,022	8,488	3,301
United Kingdom	.....	68,871	53,918	.....	76,027	54,991
Fiji and Norfolk Island	21	3,282	7,871	25	2,469	5,346
Pacific Islands, etc.	551	5,234	13,603	563	4,189	8,346
Total	6,621	91,664	79,524	5,610	91,173	71,984

The exports to the United Kingdom from New Zealand, as well as from New South Wales, consisted entirely of bunker coal for the steamers. Most of the coal-beds of the former colony are on the West coast of the South Island. The chief mines are at Westport, Greymouth, and Otago. The total quantity of coal produced in 1896 was 792,851 tons, of which the Coalbrookdale mines contributed 190,975 tons; the Brunner, 92,118 tons; and the Kaitangata, 72,536 tons. There is a steady increase in the quantity of coal raised in the colony, and a corresponding decrease in the importation. In 1896 there were 163 coal-mines in operation in New Zealand, giving employment to 1,937 men.

As showing the various kinds of coal found in New Zealand the following figures relating to the production in 1896 will be of interest:—

Bituminous coal	473,637	tons.
Pitch coal	110,547	,,
Brown coal	179,744	,,
Lignite	28,923	,,
Total	792,851	,,

Coal-mining is an established industry in Queensland, and is progressing satisfactorily. In 1896 the production showed an increase of

48,000 tons over that of the previous year, and 150 more men were employed in coal-mining than in 1895. The mines, however, are situated too far from the coast to permit of serious competition with Newcastle in an export trade, and the output is practically restricted to supplying local requirements. New South Wales still exports about 30,000 tons annually to Queensland. Of the total production of 371,390 tons in the northern colony in 1896, 280,094 tons were obtained in the Ipswich district, 80,320 tons at Wide Bay, and 10,976 tons in the Clermont district. There was an export of 17,812 tons, valued at £8,193, during the year, almost wholly to Victoria.

In Tasmania coal of good quality has been found in the lower measures of the permo-carboniferous rocks, principally in the basins of the Mersey and the Don in the north, and at Adventure Bay and Port Cygnet in the south, as well as in the upper measures of the triassic or jurassic rocks, which are extensively developed in the eastern and north-eastern parts of the colony. Mining is carried on in various districts in the island, but the principal mines are the Mount Nicholas and Cornwall, in the Mount Nicholas Range, The output on this field showed a considerable increase in 1896, and an improvement is taking place in supplying local requirements; but no export trade is at present possible, the mines being situated too far from the seaboard. During the year there were 139 men engaged in coal-mining in the colony, and the production amounted to 45,549 tons, valued at £17,354. Since 1893 the export of coal by New South Wales to Tasmania has fallen from 67,000 to 57,000 tons. A small quantity of coal is produced at the Mersey and Dulverton mines; and in 1898 work was resumed at the mines near Port Cygnet. A further discovery is reported from Swansea, on the East Coast.

Black coal has been discovered in Victoria, and is now being raised in increasingly large quantities. In 1896 the production amounted to 226,562 tons, valued at £113,012, as compared with 22,834 tons, valued at £19,731, in 1891. During this period of five years the export from New South Wales to Victoria has fallen from 954,277 tons to 714,666 tons. The principal collieries in the colony are the Outtrim Howitt, from which 126,012 tons were obtained; followed by the Coal Creek Proprietary, with 35,366 tons; the Jumbunna, with 34,103 tons; and the Korumburra, with 20,818 tons. In South Australia, at Leigh's Creek, north of Port Augusta, coal-beds have been discovered. A company has been formed for the purpose of working the deposits, and small quantities have been raised during the last three years. But the results of trials of this coal on the Government railways have been unsatisfactory. Great activity is now being shown on the Collie coal-field in Western Australia. Boring operations having proved successful, a coal-mining district was constituted in February, 1896, and thrown open for selection in the following year, 22 square miles being immediately applied for. Satisfactory tests of Collie coal have been made on the railways of the colony. A line of railway is being laid down to the

district; and the Government have agreed to connect the mines with the terminus, taking payment in coal.

The quantity of coal extracted annually in Australasia now exceeds 5,340,000 tons, valued at about £1,840,000. The production of each colony during the year 1896 was as follows:—

Colony.	Quantity.	Value.	
		Total.	Proportion raised in each Colony.
	tons.	£	per cent.
New South Wales	3,909,517	1,125,281	61·2
Victoria	226,562	113,012	6·2
Queensland	371,390	154,987	8·4
Tasmania	43,549	17,354	0·9
New Zealand	792,851	428,648	23·3
Australasia	5,343,869	1,839,282	100·0

The total quantity and value of the coal produced in the Australasian colonies up to the end of 1896 are shown below. Small quantities have been raised in South Australia and Western Australia, but these are not yet of sufficient importance to warrant inclusion in the table:—

Colony.	Quantity.	Value.	
		Total.	Proportion raised in each Colony.
	tons.	£	per cent.
New South Wales	72,282,266	31,819,331	78·9
Victoria	785,451	468,307	1·2
Queensland	4,395,569	1,992,310	4·9
Tasmania	569,434	331,913	0·8
New Zealand	10,735,900	5,738,124	14·2
Australasia	88,768,620	40,349,985	100·0

During the year 1896 this industry gave direct employment in and about the mines to the following numbers of persons in the several colonies:—

	Miners.
New South Wales	9,233
Victoria	829
Queensland	1,275
Tasmania	139
New Zealand	1,937

The average price of coal per ton varies in the colonies very considerably. In New South Wales, from the date of the commencement of mining to the end of the year 1896, the average price obtained has been 8s. 10d., but the mean of the last ten years has not been more than 7s. 8d. In 1896 the average price per ton of coal at the pit's mouth was as follows :—

	£	s.	d.
New South Wales	0	5	9
Victoria	0	10	0
Queensland	0	8	4
Tasmania	0	8	0
New Zealand	0	10	10
Australasia	0	6	11

Anthracite is found on the island of Tasmania. It is a hard and heavy mineral, burning with difficulty, and possesses very little commercial value in countries where ordinary coal abounds.

The following table shows the annual coal production of the principal countries of the world. The figures refer to the year 1896, except those for Austria-Hungary and Belgium, which refer to the year 1895 :—

Country.	Tons of 2,240 lb.
Great Britain	195,361,290
United States	171,416,390
Germany	110,680,901
Austria-Hungary	32,144,546
France	28,852,850
Belgium	20,881,547
Canada	3,341,995
Australasia	5,343,869

Kerosene Shale.

Kerosene Shale (torbanite) is found in several parts of New South Wales. It is a species of cannel-coal, somewhat similar to the Boghead mineral of Scotland, but yielding a much larger percentage of volatile hydro-carbon than the Scottish mineral. The richest quality yields about 100 to 130 gallons of crude oil per ton, or 17,000 to 18,000 cubic feet of gas, with an illuminating power of 35 to 40 sperm candles when gas only is extracted from the shale. The New South Wales Shale and Oil Company, at Hartley Vale, and the Australian Kerosene Oil and Mineral Company, at Joadja Creek and Katoomba, not only raise kerosene shale for export, but also manufacture from it petroleum oil and other products. From the year 1865, when the mines were first

opened, to the end of 1896, the quantity of kerosene shale raised has amounted to 895,334 tons, worth £1,795,213. The average price realised during that period has been £2 0s. 1d. per ton. The prices ruling in 1896, when 31,839 tons were extracted, averaged £1 1s. 6d. per ton, representing a total value of £34,202 for the production of that year. The export of shale from New South Wales during 1894, 1895, and 1896 was as follows:—

Exported to—	1894.		1895.		1896.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	tons.	£	tons.	£	tons.	£
Victoria	1,328	2,849	2,137	4,842	81	187
United Kingdom	8,019	21,059	15,423	32,609	1,431	3,156
Netherlands	5,884	15,727	6,031	13,993	2,267	5,000
Italy	1	3	2,176	5,440	5,713	13,675
United States	152	418	370	904	500	1,280
Spain	.....	.....	1,456	3,492	.....	.....
Chili	1,914	4,886	2,892	6,530	2,016	4,148
Other countries	1,561	4,245	4,064	10,124	2,212	5,400
Total	18,859	49,187	34,549	77,934	14,220	32,846

Extensive formations of oil shale have been found in New Zealand, in Otago, and at Orepuki, in Southland. Attempts have been made to develop the oil resources of Waipaoa, but so far unsuccessfully. The oil produced does not possess the properties required in illuminating oils, although it is valuable for lubricating purposes.

The net import of kerosene into Australasia in 1896 is shown below. The figures for Western Australia represent imports of mineral oil:—

Colony.	Quantity.	Value.
	gallons.	£
New South Wales	2,106,901	71,464
Victoria	2,957,983	92,090
Queensland	1,269,865	53,011
South Australia	1,349,543	32,617
Western Australia	853,649	31,953
Tasmania	222,556	8,302
New Zealand	1,713,624	64,048
Australasia	10,474,121	353,485

Other Carbon Minerals.

Of all the mineral forms of carbon the diamond is the purest, but as it is usual to class this precious substance under the head of gems that custom will be followed in the present instance.

Graphite, or plumbago, which stands second to the diamond in point of purity, has been discovered in New Zealand, in the form of detached boulders of pure mineral. It also occurs in impure masses where it comes into contact with the coal measures. This mineral, up to the present time, has not been found in any of the other colonies except New South Wales, where in 1889 a lode 6 feet wide, but of inferior quality, was discovered near Undercliff, in the New England district; and in Western Australia, in which colony, however, owing principally to difficulties of transit, very little of it has been worked.

Ozokerite, or mineral wax, is reported to have been found at Coolah, in New South Wales.

Elaterite, mineral caoutchouc, or elastic bitumen, is said to have been discovered in New South Wales and South Australia. In the last-named colony a substance very similar to elaterite has been discovered in the Coorong Lagoons, and has received the name of Coorongite. Up to the present time neither the extent of these finds nor their commercial value has been ascertained.

Bitumen is known to exist in Victoria, and is reported to have been found near the township of Coonabarabran, in New South Wales.

Kauri Gum, a resinous substance somewhat resembling amber in appearance, and like that production an exudation from trees, is found only in the Auckland province of New Zealand, where it is included under the head of minerals, although more logically entitled to be considered as a vegetable product. The best sort is dug out of the ground, but considerable quantities of inferior grades are taken from the forks of standing trees. In New Zealand an extensive and lucrative commerce is carried on in kauri gum. It is computed that the total value of this product obtained from 1853 to the end of 1896 was £8,114,842. In the year 1896 the quantity obtained represented a value of £431,323, and gave employment to a large number of persons, both European and Maori. Kauri gum is not included in the figures in this chapter giving the total mineral production.

Salts.

Common Rock Salt has been found in rock crevices in several parts of New South Wales, but it is not known to exist in large deposits so as to be of commercial importance. Natron is said to occur in the neighbourhood of the Namoi River, in the same colony. It appears as a deposit from the mud-wells of that region. Epsomite, or epsom salt, (sulphate of magnesia), is seen as an efflorescence in caves and overhanging rocks of the Hawkesbury sandstone formation, and is found in various parts of New South Wales.

Large deposits of Alum occur close to the village of Bulladelah, 30 miles from Port Stephens, New South Wales. Up to the end of the year 1896, 5,632 tons of alunite had been raised there, most of which had been sent to England for treatment. It is said to yield well, and a quantity of the manufactured alum is sent to Sydney for local consumption. During 1896 the Bulladelah mine yielded 1,372 tons of stone, valued at £4,116. In the course of the same year 130 cwt. of locally-manufactured alum, valued at £39, was exported to Victoria.

Stones and Clays.

Marble is found in many parts of New South Wales, South Australia, New Zealand, and Tasmania. In New South Wales marble quarries have been opened in several districts, and some very fine specimens of the stone have been obtained.

Lithographic stone has been found in New Zealand, where another beautiful species of limestone known as Oamaru stone is also procured. This stone has a fine, smooth grain, and is of a beautiful creamy tint. It is in great demand for public buildings, not only in the colony where it is found, but in the great cities of continental Australia, which import large quantities of the stone for the embellishment of public edifices.

Limestone was at one time worked on the Myall Lakes, near Bungwall, New South Wales; and large quantities were forwarded from this district to Sydney, where the manufacture of hydraulic lime was commenced, but owing to the lack of a market the operations were discontinued.

Gypsum is found crystallised in clay-beds in New South Wales, and in isolated crystals in the Salt Lakes of South Australia, where a small proportion of sulphate of lime is present in the water. It is also found in portions of Victoria. This mineral is of commercial value for the manufacture of cement and plaster of Paris. It is found in the form of an insoluble salt in New South Wales, Victoria, and New Zealand.

Apatite, another mineral of considerable commercial importance, and very valuable as a manure, occurs in several districts of New South Wales, principally on the Lachlan River, at the head of the Abercrombie, and in the Clarence River district.

Quartz is of common occurrence in all parts of Australasia. Rock crystal, white, tinted, and smoky quartz are frequently met with, as well as varieties of crystalline quartz, such as amethyst, jasper, and agate, which possess some commercial value.

Tripoli, or rotten stone, an infusorial earth, consisting of hydrous silica, which has some value for commercial purposes, has been found in New South Wales, Victoria, and New Zealand. Meerschaum is reported to have been discovered near Tamworth and in the Richmond River district, in New South Wales.

Mica is also found in granitic country, chiefly in the New England and Barrier districts. In Western Australia very good mica has been found at Bindoon, and also on the Blackwood River, near Cape Leeuwin.

In 1896 mica was being worked near Mingun, on the Upper Gascoyne; and lately the Western Australian Government has offered a bonus not exceeding £500 for the export of at least 2 tons of mica, to realise not less than 1s. 6d. per lb., within three months of the 28th March, 1898. Some promising discoveries have been made near Herberton, in Northern Queensland. In the Northern Territory of South Australia mica has been obtained on a small scale for a number of years. In 1895 the production was valued at £2,638; and in 1896, at £732.

Kaolin, fire-clays, and brick-clays are common to all the colonies. Except in the vicinity of cities and townships, however, little use has been made of the abundant deposits of clay. Kaolin, or porcelain clay, although capable of application to commercial purposes, has not as yet been utilised to any extent, though found in several places in New South Wales and in Western Australia.

Asbestos has been found in New South Wales in the Gundagai, Bathurst, and Broken Hill districts—in the last-mentioned district in considerable quantities. Several specimens of very fair quality have also been met with in Western Australia; and the Government of the colony has offered a bonus not exceeding £500 for the export of 50 tons of asbestos, of a value of not less than £10 per ton. In the colony of Tasmania, in the vicinity of Beaconsfield, asbestos is known to exist in considerable quantities.

Gems and Gemstones.

Many descriptions of gems and gemstones have been discovered in various parts of the Australasian colonies, but systematic search has been made principally for the diamond and the noble opal.

Diamonds are found in New South Wales, Victoria, and Queensland, but only in the first-named colony have any attempts been made to work the diamond drifts. The existence of diamonds and other gem-stones in the territory of New South Wales had been known for years before an attempt was made to work the deposits in 1872. In the course of the following year several deposits of adamantiferous wash were discovered in the country near Inverell, in the New England district. The number of diamonds found in the colony to the end of 1896 is estimated at 107,000, the largest being one of $5\frac{5}{8}$ carats, or 16·2 grains. The diamonds occur in old tertiary river drifts, and in the more recent drifts derived from them. The deposits, which occur in the Inverell, Bingara, Mittagong, Cudgegong, and Narrabri districts, are extensive, and have not yet been thoroughly prospected. The best of the New South Wales diamonds are harder and much whiter than the South African diamonds, and are classified as on a par with the best Brazilian gems. During the year 1889 the Malacca Company, near Tingha, found diamonds weighing $2{,}195\frac{5}{8}$ carats, valued at £878 5s. In 1891 no less than 12,000 carats of diamonds were won in the Tingha and Inverell districts, but no value is given. In 1892 as many as 2,250 diamonds were obtained from the Monte Christo Mine at Bingara alone. The majority of diamonds obtained

in this district weigh from $\frac{1}{6}$ to $\frac{1}{5}$ carat, while the largest vary from 2 to 3 carats. The total output of the Bingara district to the end of 1893 is said to have been about 150,000 carats, valued at £15,375. In 1894 the only work done was prospecting in the Bingara, Mittagong, and Denison Town districts; and in 1895 the industry was still quiet, but at Boggy Camp Diamond Field, 16 miles west of Tingha, a revival took place during the year, and 4,100 stones, weighing in the aggregate 1,313 carats, and valued at £400, were obtained. No estimate of the returns in 1896 were obtained from this field, but the output from the Bingara diamond-field for the year is set down at 3,000 carats.

The finest Opal known is obtained in the Upper Cretaceous formation at White Cliffs, near Wilcannia, New South Wales, and at these mines over 400 men find constant employment. During the year 1895 good stone was found at a depth of 50 feet, and as the lower levels are reached the patches of opal appear to improve in quality and to become more regular and frequent. On block 7 a patch of stone was found which realised over £3,000. It is difficult to state with exactitude the value of the production, but it is believed that stone to the value of £23,000 was sold during the three years ended 1895, while for 1896 alone the production is estimated at £25,000. The quality of the stone found on the fields varies considerably, some only realising 10s. per oz., whilst the best quality occasionally realises as much as £42 per oz. The best market for the gems is Germany, where they find a ready sale; but it is stated that the principal gem merchants of Europe have now agents on the field for the purchase of the stone.

In Queensland the opal is found in the Cretaceous areas in the far west and south-west, from a few feet to 40 feet below the surface, and its extraction affords employment to a large number of men, who, however, in the majority of cases only follow the industry in the time spared from other occupations. It is difficult to accurately estimate the production from the opal fields of the colony, but in 1896 it was set down at £23,300. Valuable opal has lately been discovered at Tairua, in the Hauraki district of the North Island of New Zealand; and also in the Mount Peel and Auckland districts, in Canterbury. Application has been made for leases covering an area of 239 acres.

Other gem-stones, including the sapphire, emerald, oriental emerald, ruby, opal, amethyst, garnet, chrysolite, topaz, cairngorm, onyx, zircon, etc., have been found in the gold and tin-bearing drifts and river gravels in numerous localities throughout the colonies. The Emerald Proprietary Company, in the Emmaville district, in the Glen Innes district, New South Wales, have sunk two shafts, 100 feet and 50 feet respectively; and 25,000 carats have been won in a rough state. Their value when cut and finished, if of the best quality, is about £2 per carat. Owing to the difficulties of extraction, and the low price of the gems in the London market, the mines have been closed for three years.

The sapphire is found in all the colonies, principally in the neighbourhood of Beechworth, Victoria. The Oriental topaz has been found in

New South Wales. Oriental amethysts also have been found in that colony; and the ruby has been found in Queensland, as well as in New South Wales.

According to an authority on the subject of gemstones, rubies, Oriental amethysts, emeralds, and topaz have been chiefly obtained from alluvial deposits, but have rarely been met with in a matrix from which it would pay to extract them.

Turquoises have been found near Wangaratta, in Victoria, and mining operations are being carried on in that colony.

Chrysoberyls have been found in New South Wales; spinel rubies, in New South Wales and Victoria; white topaz, in all the colonies; and yellow topaz, in Tasmania. Chalcedony, carnelian, onyx, and cat's-eye are found in New South Wales; and it is probable that they are also to be met with in the other colonies, particularly in Queensland. Zircon, tourmaline, garnet, and other gemstones of little commercial value are found throughout Australasia.

In South Australia some very fine specimens of garnet were found, causing some excitement at the time, as the gems were mistaken for rubies. The stones were submitted to the examination of experts, whose reports disclosed the true nature of the gems, and dispelled the hopes of those who had invested in the supposed ruby-mines of South Australia.

Production of Minerals.

The foregoing pages show that Australasia possesses invaluable mineral resources, and although enormous quantities of minerals of all kinds have been won since their first discovery, yet the deposits, with the exception, perhaps, of gold, have only reached the first period of their exploitation. Vast beds of silver, tin, and copper ore and of coal are known to exist, but their development has not reached a sufficiently advanced stage to enable an exact opinion to be expressed regarding their commercial value, though it is confidently held by mining experts that this must be enormous. The mineral production of the various colonies in 1896 will be found below :—

Colony.	Total Value.	Proportion of each Colony.	Average value per head.
	£	per cent.	£ s. d.
New South Wales	4,354,688	31·5	3 7 8
Victoria	3,344,555	24·2	2 16 9
Queensland	2,628,996	19·0	5 12 9
South Australia	321,172	2·3	0 17 11
Western Australia	1,073,246	7·7	8 19 6
Tasmania	638,623	4·6	3 18 2
New Zealand	1,482,918	10·7	2 2 0
Australasia	13,844,198	100·0	3 4 8

The total value of minerals raised in 1896 exceeded by £2,662,255 the average annual amount since 1852. It will, however, be easily understood that the proportion of mineral wealth extracted per head of the population is much less than it was during the prevalence of the gold fever. In comparison with that of the years 1851 to 1871 the production of the precious metals is considerably reduced. The search for gold, however, led to the expansion of the mining industry in other directions, and although seekers of gold have become fewer, the number of miners engaged in the extraction of other minerals has largely increased, and it is a question whether the total number of persons who gain their livelihood by mining pursuits at the present time is not equal to the number so engaged when gold and coal alone were the elements of the mineral production of the Australasian colonies. The resources known to exist and to be developed in these colonies are likely to maintain for many generations to come a large and prosperous mining population.

The following table shows the value of the mineral production of each colony during the three years 1871, 1881, and 1891, as well as the value per inhabitant for the whole of Australasia:—

Colony.	1871.	1881.	1891.
	£	£	£
New South Wales	1,650,000	2,121,000	6,395,560
Victoria	5,400,000	3,467,000	2,339,510
Queensland	806,000	3,165,000	2,299,560
South Australia	725,000	421,000	365,950
Western Australia	5,000	11,000	130,090
Tasmania	25,000	604,000	516,390
New Zealand	2,932,000	1,274,000	1,403,630
Australasia — Total	11,543,000	11,063,000	13,450,690
Australasia — Per head	£ s. d. 5 19 4	£ s. d. 3 19 8	£ s. d. 3 10 0

A comparison of the figures for 1891 with those for 1896 shown in the preceding table reveals the fact that the mineral production of 1896 was about £400,000 more than that of 1891. There were increases in Queensland, Tasmania, New Zealand, and notably in Victoria and Western Australia; and a slight decrease in South Australia; while in New South Wales the decrease amounted to £2,040,000, chiefly owing to the fall in the value of silver and, to a smaller extent, to the decline in the price of coal.

Comparing the value of mineral production in 1896 with the population, the largest share is taken by Western Australia, with £8 19s. 6d. per inhabitant; Queensland ranks second with £5 12s. 9d. per inhabitant; Tasmania third, with £3 18s. 2d.; and New South Wales

fourth, with £3 7s. 8d. The high averages of Western Australia and Queensland are due to the gold-mines, while in New South Wales nearly half the year's wealth was contributed by the silver-fields. The average per inhabitant for Australasia was £3 4s. 8d.

The following table shows the value of production in each of the colonies during 1896, distinguishing the principal minerals. With regard to some of the colonies the data are defective in respect to "other minerals," but not to such an extent as to seriously affect the gross total. The column "other minerals" includes kerosene shale in New South Wales :—

Colony.	Gold.	Silver and Silver-lead.	Copper.	Tin.	Coal.	Other Minerals.	Total.
	£	£	£	£	£	£	£
New South Wales	1,073,360	1,785,451	197,814	68,546	1,125,281	104,236	4,354,688
Victoria	3,220,348	7,158	.....	1,799	113,012	2,238	3,344,555
Queensland	2,341,348	32,162	21,042	49,018	154,987	30,439	2,628,996
South Australia.....	95,528	1,444	222,202	530	.....	1,468	321,172
Western Australia....	1,068,808	.....	100	4,338	.....	.....	1,073,246
Tasmania.....	237,574	222,948	1,659	159,038	17,354	50	638,623
New Zealand	1,041,428	10,589	.....	.....	428,648	*2,253	1,482,918
Australasia	9,078,394	2,059,752	442,817	283,269	1,839,282	140,684	13,844,198

* Exclusive of kauri gum of the value of £431,323.

Corresponding figures for the year 1897 are appended :—

Colony.	Gold.	Silver and Silver-lead.	Copper.	Tin.	Coal.	Other Minerals.	Total.
	£	£	£	£	£	£	£
New South Wales	1,088,413	1,698,239	283,174	49,900	1,230,041	232,860	4,582,627
Victoria	3,251,064	8,253	.....	1,650	108,640	1,397	3,371,004
Queensland.....	2,553,141	25,118	12,645	37,509	139,889	16,202	2,784,504
South Australia.....	120,147	1,522	242,917	10	.....	6,094	370,690
Western Australia ..	2,564,977	.....	1,033	3,275	.....	4	2,569,289
Tasmania.....	289,241	197,225	323,650	109,126	16,928	74	936,244
New Zealand	980,204	20,872	2	.....	420,357	*6,590	1,428,025
Australasia	10,847,187	1,951,229	863,421	201,470	1,915,855	263,221	16,042,383

* Exclusive of kauri gum of the value of £398,019.

The total mineral production to the end of 1897 is shown in the following table, in which the column "other minerals" again includes kerosene shale :—

Colony.	Gold.	Silver and Silver-lead.	Copper.	Tin.	Coal.	Other Minerals	Total.
	£	£	£	£	£	£	£
New South Wales	44,488,371	24,108,285	4,351,343	6,246,418	33,049,372	2,710,842	114,954,631
Victoria	247,389,792	836,234	206,395	691,187	576,947	214,474	249,915,029
Queensland	41,749,606	686,833	2,020,761	4,412,298	2,132,199	226,880	51,228,577
South Australia	2,028,603	104,693	21,280,889	26,022	.....	425,915	23,876,122
Western Australia....	6,669,018	250	167,849	73,467	.....	369,911	7,280,495
Tasmania	3,673,162	1,276,897	491,876	6,496,680	348,841	10,777	12,298,233
New Zealand	53,372,634	202,724	17,868	.....	6,158,481	*213,969	59,965,676
Australasia	399,381,186	27,215,916	28,536,981	17,946,072	42,265,840	4,172,768	519,518,763

* Exclusive of kauri gum of the value of £8,512,852.

Coal was the only mineral raised in New South Wales prior to 1852, and its production up to that date was valued at £279,923. Deducting that amount from the total value of Australasian minerals raised up to the end of 1897, the remainder, £519,238,840, represents the value of mineral production from 1852, equal to an average of £11,287,801 per annum for the forty-six years.

AGRICULTURE.

TAKEN as a whole, Australasia may be said to be in the first phase of agricultural settlement; indeed, several colonies have not yet emerged from the pastoral stage. Nevertheless the value of agricultural produce, estimated at farm prices, is considerable, and amounts to nearly 50 per cent. of the value of the pastoral and dairy produce. The return from agriculture in each colony for the season 1896–7 was approximately as shown below :—

Colony.	Total value of Crops.	Average Value of Produce per acre.	Proportion of Total Value.
	£	£ s. d.	per cent.
New South Wales	5,321,569	3 4 1	23·36
Victoria	6,042,107	2 5 4	26·53
Queensland	1,602,542	5 0 3	7·03
South Australia	1,932,869	0 18 0	8·49
Western Australia	537,978	4 16 11	2·36
Tasmania	1,103,541	4 16 1	4·84
New Zealand	6,237,548	4 0 5	27·39
Australasia	22,778,154	2 12 6	100·00

From this estimate it would seem that the value of crops per acre cultivated is much larger in Queensland than in the other colonies, a fact which is due to the proportionately large area under sugar-cane. In Tasmania the area devoted to fruit and hops, and the higher returns of cereals, account for the high average per acre which that province shows; while in Western Australia, where the greater part of the produce consumed is imported, prices are higher than in the eastern colonies, and the small area devoted to the plough returns on an average a better price per acre than in the colonies where agriculture has received greater attention. In point of gross value New Zealand occupies the first position among the members of the group, the produce of that province having a value considerably in excess of one-fourth of that of all Australasia. Victoria also produces over one-fourth of the total, and New South Wales nearly one-fourth. The value of the

principal crops, and the percentage of each to the total production, are given in the following statement :—

Name of Crop.	Value.	Proportion to Total.
	£	per cent.
Wheat	6,300,060	27·7
Maize	1,068,850	4·7
Barley	331,739	1·4
Oats	2,227,481	9·8
Other grain crops	50,270	0·2
Pease, beans, etc.	99,750	0·4
Hay	4,641,515	20·4
Potatoes	1,689,762	7·4
Other root-crops	1,199,943	5·3
Sugar-cane	559,341	2·5
Tobacco	74,240	0·3
Grapes	596,801	2·6
Green forage	456,861	2·0
Grass seed	129,020	0·6
Hops	46,052	0·2
Orchards and market-gardens	3,076,105	13·5
Other crops	230,364	1·0
Total	22,778,154	100·0

The average value of agricultural produce per head of population in each of the Australasian colonies during the season 1896–7 is represented by the figures given below. It will be seen that in the colonies of New Zealand, Tasmania, South Australia, and Victoria the development of agricultural resources has attracted the attention of the colonists to a greater extent than in the other provinces. New South Wales, however, has made a considerable advance in agricultural pursuits during the past two years, and from a position of dependence upon outside sources for a large portion of its wheat supply, has become an exporter of this cereal :—

Colony.	Average value per head.		
	£	s.	d.
New South Wales	4	2	0
Victoria	5	2	10
Queensland	3	7	11
South Australia	5	7	4
Western Australia	3	18	0
Tasmania	6	12	10
New Zealand	8	14	8
Australasia	5	5	4

Below will be found the value of the agricultural production of the colonies in the years 1871, 1881, and 1891. Comparing these figures with those for 1896–7 given above, it will be seen that while the total production of Australasia is now more than double that of twenty-five

years ago, the average value per head of population is lower. As subsequent tables will show, the great lowering of prices is responsible for this decline, and not want of productiveness. The fall in prices was very rapid down to 1895, when the price of wheat became so low as to render cultivation of this cereal unprofitable. Fortunately, the following years witnessed a great improvement in the market quotations, and the result is seen in the larger area sown with wheat in each of the colonies during the last two seasons :—

Colony.		1871.	1881.	1891.
		£	£	£
New South Wales		2,220,000	3,830,000	3,584,500
Victoria		3,300,000	5,894,000	7,009,100
Queensland		650,000	1,283,000	1,414,000
South Australia		1,789,000	3,283,000	3,045,000
Western Australia		258,000	248,000	380,900
Tasmania		724,000	981,000	1,046,500
New Zealand		1,955,000	4,650,000	5,518,000
Australasia	Total	10,896,000	20,169,000	21,998,000
		£ s. d.	£ s. d.	£ s. d.
	Per head	5 12 8	7 5 3	5 14 6

Compared with the principal countries of the world, Australasia does not take a high position in regard to the gross value of the produce of its tillage, but in value per inhabitant it compares fairly well; indeed, some of the colonies, such as New Zealand, Tasmania, and South Australia, show averages which surpass those of many of the leading agricultural countries. This may be partly seen from the following table, which gives approximately the value of agricultural production in the principal countries of the world, with the average amount per head of population :—

Countries.	Value in millions.	Per head.	Countries.	Value in millions.	Per head.
	£	£		£	£
United Kingdom	126	3·2	Holland	18	4·0
France	284	7·3	Belgium	29	4·6
Germany	262	5·1	Switzerland	9	3·0
Russia	370	3·5	United States	487	7·7
Austria	210	5·7	Canada	33	6·9
Italy	141	4·6	Cape Colony	2	1·3
Spain	94	5·5	Argentina	24	6·0
Portugal	18	4·0	Uruguay	2	2·7
Sweden	20	4·9			
Norway	3	1·7			
Denmark	19	8·6	Australasia (1896-7).	23	5·3

The following figures, giving the areas under the principal grain and other crops and the total extent of land in cultivation in each of the colonies at different periods since the year 1861, will serve to illustrate the progress which agriculture has made. In this table, and in the others which follow, the years 1861, 1871, 1881, 1891, and 1896 embrace the period from the 1st April in each of those years to the 31st March in the following year :—

Year.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.	Australasia.
	acres.	acres.	acres.	acres.	acres.	acres.	acres.	acres.
Wheat (for Grain).								
1861	123,468	196,922	392	310,636	13,584	58,823	29,531	733,356
1871	154,030	334,609	3,024	692,508	25,697	63,332	108,720	1,381,920
1881	221,888	926,729	10,958	1,768,781	21,951	51,757	365,715	3,367,779
1891	356,666	1,332,683	19,306	1,552,423	26,866	47,584	402,273	3,737,801
1896	866,112	1,580,613	35,831	1,693,045	31,489	74,516	258,608	4,540,214
Oats (for Grain).								
1861	7,224	91,061	69	1,638	507	29,022	15,872	145,393
1871	13,795	175,944	131	3,586	1,474	29,631	139,185	363,746
1881	16,348	146,995	88	3,023	827	27,535	243,387	438,203
1891	12,958	190,157	715	12,637	1,301	28,360	323,508	569,636
1896	39,530	419,460	1,881	40,215	1,753	44,768	372,597	920,204
Maize (for Grain).								
1861	57,959	1,714	1,914	18	73	.....	770	62,448
1871	119,956	1,709	20,329	.....	113	.....	.....	142,107
1881	117,478	1,783	46,480	.....	36	.....	3,177	168,954
1891	174,577	8,230	101,598	.....	23	.....	5,447	289,875
1896	211,382	9,752	115,715	.....	30	.....	12,534	349,413
Barley (for Grain).								
1861	2,924	3,419	13	10,637	2,412	7,279	3,457	30,141
1871	3,461	16,772	971	17,225	5,083	4,275	13,305	61,092
1881	6,427	48,652	256	11,953	3,679	4,597	29,808	105,372
1891	4,459	45,021	739	11,461	3,738	2,650	24,268	92,336
1896	6,453	62,373	1,122	14,484	1,903	3,988	29,813	120,136

Year.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.	Australasia.
	acres.	acres.	acres.	acres.	acres.	acres.	acres.	acres.
POTATOES.								
1861	10,040	27,174	512	2,612	277	9,349	7,292	57,256
1871	14,770	39,064	3,121	3,156	494	8,154	11,933	80,692
1881	15,943	39,129	5,086	6,136	278	9,670	22,540	98,782
1891	22,560	57,334	9,173	6,892	532	16,393	27,266	140,150
1896	31,170	43,532	10,803	6,417	720	21,651	29,990	144,283
VINES.								
1861	1,130	1,464	40	3,918	457	.....	.....	7,009
1871	4,152	5,523	568	5,455	692	.....	.....	16,390
1881	4,027	4,923	1,212	4,202	527	.....	.....	14,891
1891	8,281	24,483	1,988	12,314	1,004	.....	.....	48,070
1896	8,061	27,934	2,020	18,333	2,294	.....	.....	58,642
HAY.								
1861	45,175	74,681	280	62,874	6,676	31,803	.....	221,489
1871	51,805	103,206	3,828	97,812	.....	31,578	30,717	318,946
1881	146,610	212,150	16,926	333,467	24,445	34,790	68,423	836,811
1891	163,863	369,498	30,655	304,171	28,534	45,445	46,652	988,818
1896	327,209	416,667	35,764	339,257	69,436	47,798	297,813	1,533,944
OTHER CROPS.								
1861	17,469	13,971	1,220	8,384	719	27,109	11,584	80,456
1871	28,130	174,527	27,997	17,988	18,171	18,076	33,422	318,311
1881	49,522	55,085	36,658	28,845	1,610	20,145	337,856	529,721
1891	103,019	89,248	78,455	27,791	2,211	27,689	595,363	923,776
1896	169,800	103,466	111,400	33,241	4,113	36,808	549,890	1,008,718
TOTAL AREA UNDER CROPS.								
1861	265,389	410,406	4,440	400,717	24,705	163,385	68,506	1,337,548
1871	390,099	851,354	59,969	837,730	51,724	155,046	337,282	2,683,204
1881	578,243	1,435,446	117,664	2,156,407	53,353	148,494	1,070,906	5,560,513
1891	846,383	2,116,654	242,629	1,927,689	64,209	168,121	1,424,777	6,790,462
1896	1,659,717	2,663,797	314,536	2,144,992	111,738	229,529	1,551,245	8,675,554
LAND UNDER PERMANENT ARTIFICIALLY-SOWN GRASSES.								
1861	32,186	12,654	.....	838	.....	.....	157,994	203,672
1871	27,702	6,282	838	5,213	.....	90,247	792,529	922,811
1881	75,825	241,947	8,565	16,438	.....	136,321	3,869,646	4,348,742
1891	333,238	174,982	20,921	17,519	.....	208,596	7,357,229	8,112,485
1896	384,016	172,582	20,102	20,027	4,044	253,306	9,935,812	10,789,889

The following table shows the increase in area, and the proportional yearly increase in cultivation, in each colony during the period of 35 years under review :—

Colony.	Increase in area from 1861 to 1896.	Increase in acreage per annum.
	acres.	per cent.
New South Wales	1,394,328	5·4
Victoria	2,253,391	5·5
Queensland	310,096	12·9
South Australia	1,744,275	4·9
Western Australia	87,033	4·4
Tasmania	66,144	1·0
New Zealand	1,482,739	9·3
Australasia	7,338,006	5·5

Thus, although the provinces of Victoria, South Australia, New Zealand, and New South Wales have during this period provided the largest increase in the area of land cultivated, Queensland shows a much greater proportional increase, whilst agriculture in Tasmania has relatively to population remained almost stationary. Taking Australasia as a whole, it will be seen that the area under crop is now almost six and a half times as large as it was in 1861. If, however, the land artificially grassed be included, the total will come to 19,465,443 acres, or more than twelve times the area in cultivation in 1861. A comparison of the acreage under crop on the basis of population, which is afforded by the table given below, may perhaps best serve to give an idea of the progress of agriculture ; and it will be seen that, on this basis, the greatest advance since 1891 has been made by New South Wales :—

Colony.	1861.	1871.	1881.	1891.	1896.
	acres.	acres.	acres.	acres.	acres.
New South Wales	0·7	0·8	0·8	0·7	1·3
Victoria	0·8	1·1	1·7	1·8	2·3
Queensland	0·1	0·5	0·5	0·6	0·7
South Australia	3·2	4·5	7·5	5·9	5·9
Western Australia	1·6	2·0	1·8	1·2	0·8
Tasmania	1·8	1·5	1·2	1·1	1·4
New Zealand	0·7	1·3	2·1	2·2	2·2
Australasia	1·1	1·4	2·0	1·7	2·0

For the whole of Australasia the increase of agriculture as compared with population is shown in the following table :—

Increase of—	1861-71.	1871-81.	1881-91.	1891-96.	Whole period 1861-1896.
	per cent.	per cent.	per cent.	per cent.	per cent.
Acreage under crop.....	100·6	107·2	22·1	27·8	548·6
Population	55·6	43·2	38·1	10·9	241·5

Although during the period of thirty-five years the population of Australasia was more than trebled, yet the area of land devoted to agriculture increased more than sixfold, and the rate of agricultural progress was more than twice that of the population. This improvement took place entirely during the twenty years from 1861 to 1881, and chiefly during the latter portion of that time; while in the years from 1881 to 1896 the rate of increase was about the same, agriculture gaining during the last few years the ground which it lost between 1881 and 1891. The progress in the seventies is what naturally might be expected, as the gold fever had altogether subsided about the end of the first period, and a large portion of the population was seeking employment of a more settled nature than was afforded by the gold-fields. The comparative decrease noticeable in the eighties was attributable to various causes, such as the general tendency, elsewhere alluded to, of the population to congregate in the several metropolitan centres; the difficulty of taking up good land within easy access to markets; and also to the fact that there were large accessions to the numbers of those engaged in other callings without a corresponding increase in the agricultural classes. But the earnest attempts of the State to assist the agriculturist in obtaining land on easy terms, and to benefit him in other ways, coupled with the satisfactory advance in the price of wheat, has enabled the industry to overtake the population.

It was ascertained at the census of 1891 that the number of persons engaged in agricultural pursuits in the Australasian colonies was 310,642, of whom 286,272 were males, and 24,370 females. There is every reason to suppose that the number now is not less than 400,000.

In the following table will be found the proportion of land under crop to the total area of each colony, and the same with regard to Australasia as a whole. In instituting comparisons between the several colonies, however, it must be borne in mind that other circumstances than the mere area in cultivation require to be taken into consideration. It would not be fair, for instance, to compare Tasmania, which has 6·33 persons per square mile, with Western Australia, which has only 0·14 inhabitant to the square mile. The table has a value chiefly

because it shows how each province has progressed in cultivation of the soil during the periods quoted :—

Colony.	1861.	1871.	1881.	1891.	1896.
	per cent.	per cent.	per cent.	per cent.	per cent.
New South Wales	0·15	0·20	0·29	0·44	0·84
Victoria	0·73	1·51	2·55	3·76	4·73
Queensland	0·001	0·01	0·03	0·06	0·07
South Australia	0·07	0·15	0·37	0·33	0·37
Western Australia	0·006	0·008	0·009	0·01	0·02
Tasmania	0·97	0·92	0·88	0·99	1·36
New Zealand	0·10	0·50	1·60	2·13	2·32
Australasia	0·07	0·14	0·28	0·34	0·44

The subjoined table shows the proportion of cultivated area devoted to the principal crops in each province. It will be seen that wheat forms the greatest percentage of the total tillage in Australasia as a whole, and in New South Wales, Victoria, and South Australia. Maize and sugar-cane are the principal crops in Queensland; hay crops, in Western Australia; and oats, in New Zealand. In Tasmania only 32·5 per cent. of the cultivated area is under wheat, which, however, is still the principal crop of the colony :—

Crop.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.	Australasia.
	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.
Wheat	52·2	59·3	11·4	78·9	28·2	32·5	16·7	52·3
Oats	2·4	15·8	0·6	1·9	1·6	19·5	24·0	10·6
Maize	12·7	0·4	36·8	....	0·0	....	0·8	4·0
Barley	0·4	2·4	0·4	0·7	1·7	1·8	1·9	1·4
Potatoes	1·9	1·6	3·4	0·3	0·6	9·4	1·9	1·7
Hay	19·7	15·6	11·4	15·8	62·1	20·8	19·2	17·7
Vines	0·5	1·0	0·6	0·9	2·1	....	....	0·7
Sugar-cane	1·1	....	26·4	....	....	....	....	1·3
Other crops	9·1	3·9	9·0	1·5	3·7	16·0	35·5	10·3
Total	100·0	100·0	100·0	100·0	100·0	100·0	100·0	100·0

The position in which each of the principal agricultural products stood in relation to the total area under crop in Australasia, at various periods since the year 1861, may be ascertained from the following table. The figures should, however, be taken in conjunction with those to be found in the table on page 253, giving the actual areas cultivated, for a decline in the proportion of land under any particular crop does not necessarily mean a falling-off in the area devoted to that product; on the contrary, in few instances has there been any actual retrogression. It is satisfactory to observe that there is a greater proportionate increase in the cultivation of the more valuable crops, and that, despite a check in 1896 from causes due to unfavourable seasons, the area devoted to vines, sugar-cane, and "other crops" formed 12·3 per cent. of the whole in that year, as compared with 8·6 per cent. in 1861 :—

Product.	1861.	1871.	1881.	1891.	1896.
	per cent.	per cent.	per cent.	per cent.	per cent.
Wheat	53·6	51·4	60·7	55·0	52·3
Oats	10·6	13·5	7·9	8·4	10·6
Maize	4·6	5·3	3·0	4·3	4·0
Barley	2·2	2·3	1·9	1·4	1·4
Potatoes	4·2	3·0	1·8	2·0	1·7
Hay	16·2	11·9	15·1	16·0	17·7
Vines.....	0·5	0·7	0·3	0·7	0·7
Sugar-cane	.....	0·5	0·7	1·1	1·3
Other crops	8·1	11·4	8·6	11·1	10·3
Total.....	100·0	100·0	100·0	100·0	100·0

WHEAT.

Only four of the seven colonies—New South Wales, Victoria, South Australia, and New Zealand—produce sufficient wheat for their own requirements; but after the deficiencies of the rest of Australasia are supplied by them, there is in most seasons a large balance for export, which finds a ready market in Great Britain, where Australian wheat is well and favourably known. For the season 1896–7 a much larger area was sown with wheat in New South Wales, and the production of 8,853,445 bushels was the highest yield in the seven colonies. In Victoria and South Australia, however, protracted drought, coupled with unseasonable rainfall, had the effect of greatly curtailing the production; and, taking Australasia as a whole, in 1896 there was a net import of wheat and flour equal to 3,559,883 bushels of grain, valued at £682,000, as compared with an export of breadstuffs equivalent to 12,092,425 bushels of grain, valued at £1,440,000, in 1894.

The subjoined table shows the progress of wheat-growing during the period of the last thirty-five years :—

Colony.	1861.	1871.	1881.	1891.	1896.
	acres.	acres.	acres.	acres.	acres.
New South Wales	123,468	154,030	221,888	356,666	866,112
Victoria	196,922	334,609	926,729	1,332,683	1,580,613
Queensland	392	3,024	10,958	19,306	35,831
South Australia	310,636	692,508	1,768,781	1,552,423	1,693,045
Western Australia	13,584	25,697	21,951	26,866	31,489
Tasmania	58,823	63,332	51,757	47,584	74,516
New Zealand	29,531	108,720	365,715	402,273	258,608
Australasia	733,356	1,381,920	3,367,779	3,737,801	4,540,214

It will be seen that, during the twenty years extending from 1861 to 1881, all the colonies, with the exception of Tasmania, made considerable additions to the area under wheat, the increase for the whole of Australasia being 2,634,423 acres, or an advance of 359 per cent. From 1881 to 1896, however, the extension of this form of cultivation was by no means general. In New Zealand and South Australia the area largely decreased, in consequence of the low point to which prices fell a few years ago; but in Australasia as a whole the area in 1896 was 1,172,435 acres larger than in 1881—1,298,108 acres having been added in Victoria and New South Wales during the fifteen years. At present more than one-half of the land in cultivation is devoted to wheat-growing, and in an ordinary season the produce of 750,000 acres is available for export to Europe. The rise in prices during the past two years has been taken advantage of by the agriculturists of all the colonies. In New South Wales, especially, rapid advance has been made, and, as already stated, instead of occupying a dependent position the colony has now become an exporter of wheat; while in South Australia and New Zealand part of the areas which were abandoned as wheat lands has again been placed under this cereal.

The production of wheat during the period covered by the preceding table was as follows :—

Colony.	1861.	1871.	1881.	1891.	1896.
	bushels.	bushels.	bushels.	bushels.	bushels.
New South Wales	1,606,034	2,229,642	3,405,966	3,963,668	8,853,445
Victoria	3,607,727	4,500,795	8,714,377	13,629,370	7,091,029
Queensland	5,880	36,288	39,612	392,309	601,254
South Australia	3,410,756	3,967,079	8,087,032	6,436,488	2,804,493
Western Australia	160,155	345,368	153,657	288,810	243,928
Tasmania	1,380,913	847,962	977,365	930,841	1,286,330
New Zealand	772,531	2,448,203	8,297,890	10,257,738	5,926,523
Australasia	10,943,996	14,375,337	29,675,899	35,899,224	6,807,002

In production of wheat in 1896, due to the failure of the crops in the colonies where this cereal is principally grown, New South Wales took the lead, having to its credit 33 per cent. of the total yield. Victoria came next with 26·5 per cent.; and New Zealand produced 22·1 per cent. of the total production. The percentage contributed by New South Wales was exactly treble the proportion of that colony in 1891 :—

Colony.	1881.	1891.	1896.
	per cent.	per cent.	per cent.
New South Wales	11·5	11·0	33·0
Victoria	29·4	38·0	26·5
Queensland	0·1	1·1	2·2
South Australia	27·2	17·9	10·5
Western Australia	0·5	0·8	0·9
Tasmania	3·3	2·6	4·8
New Zealand	28·0	28·6	22·1
Australasia	100·0	100·0	100·0

The production of wheat in the Australasian colonies during the year ended March, 1898, is shown below :—

Colony.	Production.
	bushels.
New South Wales	10,560,111
Victoria	10,580,217
Queensland	1,009,293
South Australia	4,014,852
Western Australia	408,595
Tasmania	1,668,341
New Zealand	5,670,017
Australasia	33,911,426

As a producer of wheat, Australasia is of little account when viewed in comparison with the great wheat-producing countries of the world. It is estimated by the *Miller* that the production of wheat in Europe, America, Asia, and Africa in 1896 was 2,210,800,000 bushels, which, with the 26,800,000 bushels yielded by Australasia, gives the world's production as 2,237,600,000 bushels; and the seven colonies, therefore, only produced 1·2 per cent. of the total crop. The figures for

each country are appended, the production being represented in Imperial bushels :—

Country.	Bushels.	Country.	Bushels.
Europe—		Africa—	
Russia	292,000,000	Algeria	16,000,000
France	248,000,000	Egypt	8,000,000
Hungary	102,000,000	Cape Colony	4,800,000
Germany	100,000,000	Tunis	4,800,000
Italy	96,000,000	Total	33,600,000
Spain	96,000,000		
United Kingdom	54,000,000		
Roumania	40,000,000		
Austria	34,000,000	America—	
Bulgaria	32,000,000	United States	560,000,000
Caucasus	28,000,000	Canada	56,000,000
Turkey	28,000,000	Argentine Republic	48,000,000
Belgium	20,000,000	Chili	16,000,000
Servia	6,800,000	Mexico	12,000,000
Portugal	6,000,000	Uruguay	8,000,000
Greece	5,200,000	Total	700,000,000
Holland	5,200,000		
Denmark	4,000,000		
Sweden	4,000,000		
Switzerland	4,000,000	Australasia—	
Total	1,205,200,000	New South Wales	8,850,000
		Victoria	7,090,000
		New Zealand	5,926,000
		South Australia	2,804,000
Asia—		Tasmania	1,286,000
India	192,000,000	Queensland	600,000
Asia Minor	48,000,000	Western Australia	244,000
Persia	20,000,000	Total	26,800,000
Syria	12,000,000		
Total	272,000,000	Grand Total	2,237,600,000

The yield of wheat per acre in Australasia during the year 1896–7 ranged from 1·7 bushels in South Australia, where the crop was a complete failure, to 22·9 in New Zealand, the average for the whole of the colonies being 5·9 bushels. The average yield in each province during the ten years ended 1896 is given below :—

Colony.	Average yield, 1887–96. bushels.
New South Wales	11·0
Victoria	8·6
Queensland	14·7
South Australia	5·9
Western Australia	10·9
Tasmania	17·4
New Zealand	23·8
Australasia	9·1

A yield of 9·1 bushels per acre is certainly a small one when compared with the following results obtained in other countries :—

Country.	Average Yield.	Country.	Average Yield.
	bushels.		bushels.
Denmark	32·3	France	17·9
Germany	29·5	Austria	16·1
United Kingdom	26·9	British Columbia	16·1
Holland	26·6	United States	12·7
Belgium	25·2	Italy	10·7
Norway and Sweden	23·0	Quebec	9·0
Ontario	19·9	Nova Scotia	9·0
Manitoba	18·6	Russia	9·0

A bare statement of averages, however, is somewhat misleading. In South Australia, for example, it is found that owing to favourable conditions of culture a yield of 7 bushels is financially as satisfactory a crop as one of 15 bushels in New South Wales or of 20 bushels in New Zealand. In the Australasian colonies the yield could be greatly increased if cultivation of a more scientific character were adopted. As a rule, the seed is simply put into the ground, and little is done to assist the natural growth of the crops.

Below will be found a statement showing the average annual yield and consumption of wheat in each colony for the period of ten years ended 1896, with the surplus or deficiency in each case :—

Colony.	Yield, less requirements for Seed.	Consumption.	Surplus available for Export.	Deficiency Imported.
	bushels.	bushels.	bushels.	bushels.
New South Wales	4,551,000	7,277,000	.....	2,726,000
Victoria	9,723,000	5,526,000	4,197,000	.....
Queensland	274,000	2,366,000	.....	2,092,000
South Australia	10,431,000	2,735,000	7,696,000	.....
Western Australia	299,000	625,000	.....	326,000
Tasmania	834,000	1,014,000	.....	180,000
New Zealand	6,549,000	4,656,000	1,893,000	.....
Australasia	32,661,000	24,199,000	8,462,000	.....

The exporting colonies shown in the table are South Australia, Victoria, and New Zealand, to which must now be added New South Wales ; the others import, the deficiency in Queensland being over 2,000,000 bushels ; while over the period of ten years covered by the table New South Wales found it necessary to import nearly $2\frac{3}{4}$ million bushels annually. The average consumption per head of population in each of the seven colonies for the last decade was as stated below.

The large proportion of adult male population in Western Australia accounts for the high figures for that province :—

	Bushels.
New South Wales	6·2
Victoria	6·2
Queensland	5·7
South Australia	6·3
Western Australia	9·2
Tasmania	6·7
New Zealand	7·1

For the whole of Australasia, the average consumption was 6·8 bushels per head, which is larger than the quantity consumed in any other part of the world for which records are available, with the exception of France. This will be evident from the following figures :—

	Bushels.
United Kingdom	5·9
France	8·1
Germany	3·0
Russia	2·1
Austria	2·9
Italy	5·4
Spain and Portugal	6·4
Belgium and Holland	5·0
Scandinavia	1·4
Turkey	6·1
United States	5·0
Canada	6·5

The following table shows the net imports or exports of wheat and flour of each of the colonies during the year 1896, 1 ton of flour being taken as equal to 50 bushels of grain. The failure of the wheat crop in the drought-stricken areas of Victoria and South Australia resulted in the unusual experience of a net import into Australasia from other countries :—

Colony.	Net Imports.	Net Exports.
	bushels.	bushels.
New South Wales	3,588,423	.....
Victoria	.....	61,189
Queensland	2,509,707	.....
South Australia	.....	2,726,692
Western Australia	926,246	.....
Tasmania	105,894	.....
New Zealand	.....	782,515
Australasia	3,559,883	.....

In ordinary seasons Australasia ranks about sixth amongst the exporting countries ; still, its contribution to the world's markets does not form more than one-thirtieth of the demand, and it cannot, therefore, be said to form a factor of any consequence in the trade.

The United Kingdom is the largest importer of wheat, and the British demand largely influences the price throughout the world. The average rate per bushel in London for the season extending from September 1, 1892, to August 31, 1893, was 3s. 4d. In the latter months of 1893 the price of wheat ranged from 3s. 2d. to 3s. 6d. per bushel. The price in 1894 showed a still further downward tendency, the average for the year being 2s. 10d. per bushel. The following year, however, showed an improvement, and the average was 2s. 11d. per bushel; while in 1896 and 1897 the prices averaged 3s. 4d. and 3s. 9d. per bushel respectively.

The average London prices per quarter of 8 bushels during the last decennial period were as follow :—

Year.	Price per quarter.	Year.	Price per quarter.
	s. d.		s. d.
1888	31 10	1893	26 4
1889	29 9	1894	22 10
1890	31 11	1895	23 1
1891	37 0	1896	26 2
1892	30 3	1897	30 2

In the subjoined table is given the value of the yield per acre for three of the colonies, estimated on the basis of the market rates ruling in February and March of each year. It will be seen that a considerable decline took place between 1888 and 1895, due for the most part to the fall in prices rather than to any decrease of production. The effect of the rise in prices is seen in the more satisfactory results in New South Wales during the seasons 1895–6 and 1896–7; for Victoria and South Australia the drought is largely responsible for the low values in those years :—

Year ending March.	Average Yield per acre.			Value of Average Yield per acre.		
	New South Wales.	Victoria.	South Australia.	New South Wales.	Victoria.	South Australia.
	bushels.	bushels.	bushels.	£ s. d.	£ s. d.	£ s. d.
1888	12·1	10·8	*	2 2 10	1 16 0	*
1889	4·8	7·1	*	1 2 10	1 12 6	*
1890	15·6	9·7	7·8	2 14 7	1 15 7	1 8 0
1891	10·9	11·1	5·6	2 0 10	1 19 9	0 19 7
1892	11·1	10·3	4·3	2 2 6	2 2 3	0 17 11
1893	15·1	11·0	6·1	2 5 2	1 14 0	0 19 3
1894	11·0	10·4	7·9	1 10 1	1 0 1	0 18 4
1895	10·9	8·3	4·9	1 4 6	0 13 6	0 8 0
1896	8·7	4·0	1·8	1 17 0	0 17 9	0 9 10
1897	10·2	4·5	1·7	2 3 5	1 3 8	0 8 7

* No returns.

The rates just given, as well as elsewhere in this chapter, represent farm prices, and not values at the point of consumption.

Oats.

The cultivation of oats, which come next to wheat in importance as a grain crop, is increasing in Australasia, as the following figures show:—

Colony.	1861.	1871.	1881.	1891.	1896.
	acres.	acres.	acres.	acres.	acres.
New South Wales	7,224	13,795	16,348	12,958	39,530
Victoria	91,061	175,944	146,995	190,157	419,460
Queensland	69	131	88	715	1,881
South Australia	1,638	3,586	3,023	12,637	40,215
Western Australia	507	1,474	827	1,301	1,753
Tasmania	29,022	29,631	27,535	28,360	44,768
New Zealand	15,872	139,185	243,387	323,508	372,597
Australasia	145,393	363,746	438,203	569,636	920,204

The colony of New Zealand furnishes considerably more than one-half of the production of oats. In New South Wales the cultivation of the cereal has been comparatively neglected; in Victoria, however, it is next to wheat in importance; whilst in Queensland, South Australia, and Western Australia the climate is ill-adapted to the cultivation of oats, and the yield is small and counts for very little in the total production of the grain. The total yield in each colony for the period covered by the preceding table was as follows:—

Colony.	1861.	1871.	1881.	1891.	1896.
	bushels.	bushels.	bushels.	bushels.	bushels.
New South Wales	152,426	280,887	356,566	276,259	834,633
Victoria	2,136,430	3,299,889	3,612,111	4,412,730	6,816,951
Queensland	.....	.....	1,121	16,669	32,181
South Australia	33,160	38,894	32,219	80,876	189,716
Western Australia	8,162	28,330	8,270	18,539	18,871
Tasmania	751,475	593,477	783,129	873,173	971,996
New Zealand	512,665	3,726,810	6,924,848	11,009,020	11,232,803
Australasia	3,594,318	7,968,287	11,718,264	16,687,266	20,097,151

The average yield per acre in each colony for the ten years ended 1896 was as follows:—

	Bushels.
New South Wales	20·0
Victoria	19·8
Queensland	18·2
South Australia	9·2
Western Australia	16·4
Tasmania	26·1
New Zealand	31·1

The average yield of Australasia is 26·0 bushels, exceeding Germany with 25·7 bushels; United States, 25·1 bushels; France, 23·8 bushels; Hungary, 22·7 bushels; Austria, 22·7 bushels; and Russia in Europe, 18·8 bushels. Of the seven colonies, New Zealand has the highest average yield per acre; but its return is exceeded by Holland, with 44·3 bushels; the United Kingdom, with 39·6 bushels; and Canada, with 34·5 bushels.

The total value of the oats crop and the return per acre, in each of the Australasian colonies, for the season 1896–7, will be found below :—

Colony.	Value.	Value per acre.
	£	£ s. d.
New South Wales	83,464	2 2 3
Victoria	752,705	1 15 11
Queensland	3,620	1 18 6
South Australia	20,157	0 10 0
Western Australia	2,595	1 9 7
Tasmania	101,250	2 5 3
New Zealand	1,263,690	3 7 9
Australasia	2,227,481	2 8 5

The net import or export of oats by each of the colonies is given in the following table. New Zealand was the only province which exported this cereal to any considerable extent in 1896, its export for the year being 2,246,921 bushels, of which quantity 224,005 bushels were forwarded to the United Kingdom :—

Colony.	Net Imports.	Net Exports.
	bushels.	bushels.
New South Wales	877,313	.....
Victoria	241,977	.....
Queensland	88,484	.....
South Australia	18,298	.....
Western Australia	998,510	.....
Tasmania	.....	304,739
New Zealand	.....	2,246,921
Australasia	.....	327,078

According to a carefully-compiled estimate of the average production of oats throughout the world, issued by the Agricultural Department of the United States, the commercial supply of this grain is represented by the following condensed results :—

	Bushels.
Europe (official estimates)	1,697,385,222
,, (unofficial estimates)	34,050,000
United States	799,253,793
Australasia	20,097,151
Canada	107,253,299
Total	2,658,039,465

Maize.

Maize is the principal crop grown in Queensland, and one of the most important products of New South Wales. In the other colonies the climate is not suited to its growth, and the cultivation of the cereal extends to little more than 22,000 acres. The following figures show that fair progress has been made since 1861 in the area devoted to this crop :—

Colony.	1861.	1871.	1881.	1891.	1896.
	acres.	acres.	acres.	acres.	acres.
New South Wales	57,959	119,956	117,478	174,577	211,382
Victoria	1,714	1,709	1,783	8,230	9,752
Queensland	1,914	20,329	46,480	101,598	115,715
New Zealand	770	.....	3,177	5,447	12,534
Other colonies ...	91	113	36	23	30
Australasia ...	62,448	142,107	168,954	289,875	349,413

The production in the same years was as follows :—

Colony.	1861.	1871.	1881	1891.	1896.
	bushels.	bushels.	bushels.	bushels.	bushels.
New South Wales	1,727,434	4,015,973	4,330,956	5,721,706	5,754,217
Victoria	20,788	30,833	81,007	461,447	566,027
Queensland	42,100	508,000	1,313,655	3,077,915	3,065,333
New Zealand	31,570	.....	127,257	238,746	503,652
Other colonies ...	367	2,000	648	483	504
Australasia ...	1,822,259	4,556,806	5,853,523	9,500,297	9,889,733

The following table shows the average yield of each colony and of Australasia for the ten years ended 1896 :—

Colony.	Bushels.
New South Wales	29·7
Victoria	50·1
Queensland	24·2
Western Australia	18·9
New Zealand	42·1
Australasia	28·7

The averages for Victoria and New Zealand are of little value, as the area under maize in those colonies is small and very favourably situated ; while Western Australia in 1896 had but 30 acres under cultivation, producing 504 bushels. The average yield of maize in the United States

is 22·3 bushels; while for Hungary the average is 18·8 bushels; for Austria, 18·2 bushels; for France, 18·1 bushels; for Italy, 14·4 bushels; for Roumania, 12·3 bushels, and for Russia in Europe, 12·3 bushels. Nothing is to be gained, however, by comparing these figures with the Australasian averages, as the acreage devoted to maize in these colonies is too small to make such a comparison of value.

The total value of the crop of 1896-7, and the average return per acre, will be found below :—

Colony.	Total value of crop.	Average value per acre.
	£	£ s. d.
New South Wales	575,422	2 14 5
Victoria	104,950	10 15 3
Queensland	306,533	2 12 11
New Zealand	81,844	6 10 7
Other colonies	101	3 7 4
Australasia	1,068,850	3 1 2

The high average value per acre of maize produced in Victoria and New Zealand is due to the fact that the area under this crop is small, and the local average prices are relatively higher than in New South Wales and Queensland, where large areas are devoted to the cultivation of this cereal.

The net import or export of maize by each colony during 1896 was as follows :—

Colony.	Net Imports.	Net Exports.
	bushels.	bushels.
New South Wales	48,630	.....
Victoria	1,707	.....
Queensland	.....	30,098
South Australia	22,593	.....
Western Australia	13,347	.....
Tasmania	1,577	.....
New Zealand	.....	13,482
Australasia	44,274	.....

Although the principal maize-growing colony, New South Wales is the only one which imports maize to any extent from abroad. Australasia practically consumes the whole of its production of this cereal, and an excess of imports or exports in any individual year is of little importance. In this part of the world corn does not enter into consumption as an article of food, as it does in other countries, and

particularly in America, which produces and consumes more than 80 per cent. of the whole maize crop of the world, as the following figures—compiled on the authority of the Department of Agriculture in the United States—will show :—

	bushels.
Europe (official)	303,330,204
,, (unofficial)	54,196,250
Asia (official)	823,868
Africa ,,	2,904,979
,, (unofficial)	13,620,000
United States (official)	2,283,875,165
America (unofficial)	229,109,606
Australasia	9,889,733
Various Islands (unofficial)	30,147
Total	2,897,779,952

Barley.

Of the cereal productions of Australasia, barley is grown on the smallest acreage. The area under this crop at different periods was as follows :—

Colony.	1861.	1871.	1881.	1891.	1896.
	acres.	acres.	acres.	acres.	acres.
New South Wales	2,924	3,461	6,427	4,459	6,453
Victoria	3,419	16,772	48,652	45,021	62,373
Queensland	13	971	256	739	1,122
South Australia	10,637	17,225	11,953	11,461	14,484
Western Australia	2,412	5,083	3,679	3,738	1,903
Tasmania	7,279	4,275	4,597	2,650	3,988
New Zealand	3,457	13,305	29,808	24,268	29,813
Australasia	30,141	61,092	105,372	92,336	120,136

For the same years the production was as stated below :—

Colony.	1861.	1871.	1881.	1891.	1896.
	bushels.	bushels.	bushels.	bushels.	bushels.
New South Wales	41,054	55,284	135,218	93,446	110,340
Victoria	68,118	335,506	927,566	830,741	815,605
Queensland	158	11,836	3,207	21,302	19,340
South Australia	168,137	164,161	137,165	107,183	107,798
Western Australia	2,412	5,083	36,790	48,594	12,816
Tasmania	169,381	76,812	102,475	71,686	74,790
New Zealand	96,658	287,646	664,093	688,683	821,506
Australasia	545,918	936,328	2,006,514	1,861,635	1,962,195

The average yield of barley per acre in each colony, for the ten years ended 1896, is given in the following table :—

Colony.	Bushels.
New South Wales	17·3
Victoria	16·8
Queensland	21·9
South Australia	12·6
Western Australia	13·6
Tasmania	22·2
New Zealand	28·0
Australasia	19·3

Barley is not cultivated in these colonies to the extent it deserves. In fruitful seasons Australasia produces sufficient barley, exclusive of that required for malt, for home requirements, and a small surplus for export; but if the combined trade in barley and malt be considered, all the colonies, with the exception of Victoria, Tasmania, and New Zealand, are dependent upon external sources. The high import duties in Victoria on both these articles practically prohibit importations. The trade in barley and malt of each colony in 1896 was as follows :—

Colony.	Barley.		Malt.	
	Net Imports.	Net Exports.	Net Imports.	Net Exports.
	bushels.	bushels.	bushels.	bushels.
New South Wales	44,414	.....	336,791	.....
Victoria	37,754	.....	.....	81,027
Queensland	18,295	.....	147,199	.....
South Australia	36,164	.....	28,774	.....
Western Australia	8,343	.....	76,780	.....
Tasmania	.....	23,931	.....	31,130
New Zealand	.....	43,729	.....	120,828
Australasia	77,310	.....	356,559	.....

The total value of the barley crop and the average return of this cereal per acre during the season 1896–7 will be found below :—

Colony.	Total value of barley crop.	Average value per acre.
	£	£ s. d.
New South Wales	15,171	2 7 0
Victoria	139,332	2 4 8
Queensland	2,659	2 7 5
South Australia	17,966	1 4 10
Western Australia	2,563	1 6 11
Tasmania	10,284	2 11 7
New Zealand	143,764	4 16 5
Australasia	331,739	2 15 3

POTATOES.

The cultivation of the potato is not confined to any particular colony. Victoria and New South Wales have the largest areas under this crop, but both are exceeded by New Zealand in production. The following table shows the acreage under potatoes in each colony :—

Colony.	1861.	1871.	1881.	1891.	1896.
	acres.	acres.	acres.	acres.	acres.
New South Wales	10,040	14,770	15,943	22,560	31,170
Victoria	27,174	39,064	39,129	57,334	43,532
Queensland	512	3,121	5,086	9,173	10,803
South Australia	2,612	3,156	6,136	6,892	6,417
Western Australia	277	494	278	532	720
Tasmania	9,349	8,154	9,670	16,393	21,651
New Zealand	7,292	11,933	22,540	27,266	29,990
Australasia	57,256	80,692	98,782	140,150	144,283

The production for the same periods was as follows :—

Colony.	1861.	1871.	1881.	1891.	1896.
	tons.	tons.	tons.	tons.	tons.
New South Wales	30,942	44,758	44,323	62,283	84,214
Victoria	59,364	125,841	134,290	109,786	146,555
Queensland	1,080	6,585	11,984	25,018	32,773
South Australia	7,726	10,989	18,154	27,824	16,139
Western Australia	817	1,457	556	1,596	2,089
Tasmania	47,428	22,608	33,565	63,100	72,241
New Zealand	37,554	42,130	121,890	162,046	157,529
Australasia	184,911	254,368	364,762	451,653	511,540

The average production of potatoes per acre is next given, for the ten years ended 1896. New Zealand, it will be seen, shows a considerably larger return than any of the other provinces :—

	tons.
New South Wales	2·8
Victoria	3·4
Queensland	3·1
South Australia	3·6
Western Australia	3·2
Tasmania	3·8
New Zealand	5·6
Australasia	3·8

These results compare well with the following returns from other countries :—

	tons.
Belgium	5·7
United Kingdom	4·8
Germany	4·1
Austria	3·3
Hungary	2·2
Roumania	2·2
United States	2·0
Italy	1·5

Only three of the colonies are in a position to export potatoes in any quantity—Tasmania, Victoria, and New Zealand. The surplus in Victoria, though at one time considerable, has now very much decreased. The following were the imports or exports of potatoes by each colony in 1896 :—

Colony.	Net Imports.	Net Exports.
	tons.	tons.
New South Wales	39,371	.....
Victoria	.....	12,517
Queensland	19,211	.....
South Australia	.....	51
Western Australia	8,286	.....
Tasmania	.....	48,252
New Zealand	.....	3,632
Australasia	2,416	.....

The total value of the potato crop and the average return per acre for 1896–7 will be found below :—

Colony.	Value of crop.	Average value per acre.
	£	£ s. d.
New South Wales	294,749	9 9 1
Victoria	513,553	11 15 11
Queensland	114,706	10 12 4
South Australia	56,554	8 16 3
Western Australia	20,890	29 0 3
Tasmania	216,723	10 0 2
New Zealand	472,587	15 15 2
Australasia	1,689,762	11 14 3

Hay.

Considerable quantities of wheat, oats, and barley are grown for the purpose of being converted into hay, but the area cut varies, of course, according to the season. In 1896 the season was very unfavourable to grain, and in point of value the hay crop came second amongst agricultural products. The area cut for hay has largely increased since 1881, as will be seen from the table appended :—

Colony.	1861.	1871.	1881.	1891.	1896.
	acres.	acres.	acres.	acres.	acres.
New South Wales	45,175	51,805	146,610	163,863	327,209
Victoria	74,681	103,206	212,150	369,498	416,667
Queensland	280	3,828	16,926	30,655	35,764
South Australia	62,874	97,812	333,467	304,171	339,257
Western Australia	6,676	*14,342	24,445	28,534	69,436
Tasmania	31,803	31,578	34,790	45,445	47,798
New Zealand	†27,160	30,717	68,423	46,652	297,813
Australasia.....	248,649	333,288	836,811	988,818	1,533,944

* In 1869. † In 1867.

The production for the same periods was as follows :—

Colony.	1861.	1871.	1881.	1891.	1896.
	tons.	tons.	tons.	tons.	tons.
New South Wales.....	57,363	77,460	198,532	209,417	334,902
Victoria	92,497	144,637	238,793	505,246	449,056
Queensland	459	6,278	19,640	58,842	69,559
South Australia.....	78,886	98,266	240,827	193,317	170,808
Western Australia	6,609	14,288	24,445	28,534	50,500
Tasmania	59,851	30,891	44,957	66,996	44,344
New Zealand.....	36,666	35,674	89,081	67,361	440,000
Australasia.....	332,331	407,494	856,275	1,129,713	1,559,169

The average yield of hay per acre will be found in the next table, the period covered being the ten years which closed with 1896 :—

	tons.
New South Wales.....	1·1
Victoria	1·2
Queensland.....	1·8
South Australia.....	0·9
Western Australia	0·9
Tasmania	1·2
New Zealand.....	1·3
Australasia	1·1

The greater portion of the hay is made from wheat, though large quantities of oaten and lucerne hay are produced in Victoria, New South Wales, and New Zealand. For the most part, hay is grown in each province in quantities sufficient for its own requirements, New South Wales and Western Australia ordinarily being the only colonies which import to any extent, although in 1896 they were joined by Queensland.

The net import or export of hay and chaff by each colony during the year 1896 was as follows :—

Colony.	Net Imports.	Net Exports.
	tons.	tons.
New South Wales	48,473	.....
Victoria	.....	19,464
Queensland	7,004	.....
South Australia	.....	32,766
Western Australia	13,512	.....
Tasmania	.....	13,428
New Zealand	.....	5,346
Australasia	.....	2,015

The total value of the hay crop and the average return per acre for the season 1896–7 will be found below :—

Colony.	Total Value of Hay Crop.	Average Value per Acre.
	£	£ s. d.
New South Wales	1,339,608	4 1 11
Victoria	1,272,325	3 1 1
Queensland	278,236	7 15 11
South Australia	483,956	1 8 6
Western Australia	378,750	5 9 1
Tasmania	144,108	3 0 4
New Zealand	744,532	2 10 0
Australasia	4,641,515	3 0 6

Green Forage and Sown Grasses.

The cultivation of maize, sorghum, barley, oats, and other cereals for the purpose of green food, and the laying-down of lands under lucerne and grass, engage attention in the districts where dairy-farming is carried on. The agricultural returns of some of the colonies do not admit of a distribution being made between these forms of cultivation prior to 1887. The following table shows the area under such green food in 1887, 1891, and 1896, and it will be seen that there have been large developments in most of the colonies, especially in New Zealand. After a consideration of the figures relating to the last-mentioned

province, little difficulty will be experienced in accounting for its superiority in the dairy-farming industry :—

Colony.	Green Food.			Sown Grasses.		
	1887.	1891.	1896.	1887.	1891.	1896.
	acres.	acres.	acres.	acres.	acres.	acres.
New South Wales..	20,403	32,138	74,472	192,678	333,238	384,016
Victoria	6,036	9,202	23,043	154,612	174,982	172,582
Queensland	9,582	10,727	16,822	13,619	20,921	2,767
South Australia ...	10,079	6,416	7,371	23,217	17,519	20,027
Western Australia..	... ..	238	815	.....	.....	4,044
Tasmania	1,246	1,101	1,938	184,653	208,596	253,306
New Zealand.....	98,029	118,484	10,083	5,869,247	7,357,229	9,935,812
Australasia ...	145,375	178,306	134,544	6,438,026	8,112,485	10,772,554

In Victoria, Tasmania, and New Zealand large quantities of grass-seeds, chiefly rye-grass and cocksfoot, are produced, the quantities in 1896 being given as 32,433 bushels, 25,000 bushels, and 800,000 bushels respectively, valued at £5,270 in Victoria, £3,750 in Tasmania, and £120,000 in New Zealand, or a total of £129,020. The acreage on which this grass-seed was produced in New Zealand is included in the total given for sown grasses, while for Victoria and Tasmania it is not so included, and was 2,906 and 2,302 acres respectively.

The Vine.

The history of the vine in Australia dates from the year 1828, when cuttings from the celebrated vineyards of France, Spain, and the Rhine Valley were planted in the Hunter River District of New South Wales, forming the nursery for the principal vineyards of that colony. Years afterwards the vine was planted in the Murray River District and other parts of New South Wales, and was afterwards introduced into Victoria and South Australia, and is now cultivated in all the provinces of the Australian continent. In South Australia a large proportion of Germans are employed in the industry of wine-making.

The climate and soil of Australia are peculiarly adapted to the successful cultivation of the vine, and with an increasing local demand, and the opening up of a market in England, where Australian wines have obtained due appreciation, the future expansion of wine-growing appears fairly assured. The depreciation which some of the foreign wines have suffered, both in quantity and quality, owing to the devastation of the vineyards by phylloxera, is an additional reason why the vine-growers of this continent should look forward to largely-increased operations for their industry.

The progress of vine cultivation since the year 1861 is illustrated by the table subjoined. The areas given include the vines producing

table-fruit, as well as those cultivated for wine-making, also the young vines not yet in bearing :—

Colony.	1861.	1871.	1881.	1891.	1896.
	acres.	acres.	acres.	acres.	acres.
New South Wales	1,130	4,152	4,027	8,281	8,061
Victoria	1,464	5,523	4,923	24,483	27,934
Queensland	40	568	1,212	1,988	2,020
South Australia.....	3,918	5,455	4,202	12,314	18,333
Western Australia	457	692	527	1,004	2,294
Australia	7,009	16,390	14,891	48,070	58,642

At present the area devoted to vines is much larger in Victoria and South Australia than in the other colonies. Of recent years great attention has been paid to the industry in Victoria, and that province now produces more than half the wine made in Australia. The following tables show the progress made in wine-growing during the last thirty-five years :—

Colony.	1861.	1871.	1881.	1891.	1896.
	gallons.	gallons.	gallons.	gallons.	gallons.
New South Wales.....	85,328	413,321	513,688	913,107	794,256
Victoria	47,568	713,589	539,191	1,554,130	2,822,263
Queensland.....	.....	.....	72,121	168,526	170,733
South Australia.....	312,021	852,315	313,060	801,835	1,743,090
Western Australia	.....	.....	99,600	166,664	75,693
Australia	444,917	1,979,225	1,537,660	3,604,262	5,606,035

The production of table-grapes during the same period is shown below :—

Colony.	1861.	1871.	1881.	1891.	1896.
	tons.	tons.	tons.	tons.	tons.
New South Wales.....	224	508	1,103	3,694	2,885
Victoria	849	1,545	740	2,791	6,537
Queensland.....	.....	.....	255	1,169	600
South Australia.....	1,161	1,692	1,498	4,590	18,000
Western Australia	.....	.....	.....	.....	400
Australia.....	2,234	3,745	3,596	12,244	28,422

Among other produce of the vineyards may be mentioned 7,134 gallons of brandy in New South Wales, and 767 gallons in Queensland ; while Victoria and South Australia produced respectively 12,038 cwt. and 7,097 cwt. of raisins and currants.

It is impossible to tabulate the average wine-yield of all the colonies, as in many instances the acreage under cultivation for wine-making purposes cannot be separated from young unproductive vineyards or areas cultivated for table varieties of the grape only. Making due allowance for this fact, it would appear that the average production for the season 1896-7 was about 81 gallons in Western Australia, 140 gallons in Victoria, 172 gallons in New South Wales, and 180 gallons in Queensland. Taking an average year, the production for Australia may be set down at 190 gallons. The average production in gallons per acre for other countries is shown by the following figures, which are for the latest available periods :—

Country.	Gallons per acre.	Country.	Gallons per acre.
Algeria	300	Spain	130
Cape Colony	220	Russia	130
Switzerland	210	Austria	129
Roumania	194	Chili	100
Portugal	175	Argentine Republic	100
Servia	150	Italy	87
France	143	Hungary	51
United States	140		
Germany	134	Australia	190

Compared with the wine production of other countries, as given hereunder, that of Australia is certainly trifling, but the prospects of the industry are sufficiently promising to encourage a hope that the coming years will witness important developments ; indeed, the production in 1896–7 was 55 per cent. greater than in 1894–5. The table is based on figures taken from the *Moniteur Vinicole*, and refers to the vintage of 1897 :—

Country.	Production in million gallons.	Country.	Production in million gallons.
France	728	Bulgaria	24
Italy	485	Servia	20
Spain	447	United States	19
Algeria	83	Brazil	8
Roumania	72	Azores, Canaries, and Madeira	5
Austria-Hungary	62	Tunis	4
Russia	56	Cape Colony	2
Portugal	56	Mexico	2
Germany	47	Persia	1
Turkey	40	Australia	6
Chili	33		
Argentine	30		
Switzerland	28		
Greece	27	Total	2,285

The following table illustrates the progress made in the export of Australian wine to countries outside of Australasia since 1881. It will be noticed that in 1896 the trade had grown to sixteen times the value in 1881, while the number of gallons exported to foreign countries had increased more than thirty-fold. The 1896 figures are exclusive of Queensland, 27 gallons, valued at £15 ; and Western Australia, 72 gallons, valued at £20 :—

Colony.	1881.		1891.		1896.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	gallons.	£	gallons.	£	gallons.	£
New South Wales..	13,271	3,520	12,368	2,904	12,706	2,542
Victoria	5,588	2,341	142,294	26,152	338,667	51,520
South Australia	1,751	580	227,681	39,054	312,401	47,522
Australia ...	20,610	6,441	382,343	68,110	663,774	101,584

Including the intercolonial as well as the foreign trade, the exports of each colony during the same years are shown below. The figures for 1896 are exclusive of Queensland, 49 gallons, valued at £22 ; and Western Australia, 80 gallons, valued at £23 :—

Colony.	1881.		1891.		1896.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	gallons.	£	gallons.	£	gallons.	£
New South Wales..	22,377	7,233	54,143	11,644	24,177	6,010
Victoria	12,544	5,388	160,982	32,516	354,361	56,634
South Australia.....	54,001	12,637	285,107	58,282	389,389	72,697
Australia ...	88,922	25,258	500,232	102,442	767,927	135,341

The total value of the grape crop and the average return per acre in the Australian colonies, for the year 1896, will be found below :—

Colony.	Total value of crop.	Average value per acre—	
		Of Total Area under Vines.	Of Productive Vines.
	£	£ s. d.	£ s. d.
New South Wales	101,385	12 11 7	13 17 9
Victoria	303,091	10 17 0	12 14 3
Queensland	17,759	8 15 10	9 12 10
South Australia	160,997	8 15 7	11 4 8
Western Australia.....	13,569	5 18 4	9 3 1
Australia	596,801	10 3 7	12 4 7

The Government of Victoria have advanced £8,000 towards the establishment of wineries at Rutherglen, Mooroopna, and in other country districts, the agreement being that the sum granted in each case should be supplemented by an equal amount raised locally. It is anticipated that these wineries will soon be in full operation; and it is proposed to extend the district co-operative wineries by a further State expenditure of £20,000 during the financial year, 1898–9.

SUGAR-CANE.

The growth of the cane and the manufacture of sugar are important industries in Queensland and New South Wales; but whilst the climate of the former colony renders the employment of white labour in the field almost impossible, the plantations of the latter are worked, as a rule, without the assistance of coloured labour. The Queensland planters usually combine the functions of cane-growers and sugar-manufacturers; but in New South Wales, where the numerous holdings are, as a rule, small in area, the cane is purchased from the planters, principally by the Colonial Sugar Refining Company, whose various crushing-mills and refinery are fitted with machinery of the most modern character. The importation of coloured labour into Queensland has been renewed under stringent regulations for the protection of the Kanakas. The attempt made in 1891 by the planters to solve the difficult problem as to whether successful sugar-growing is compatible with the employment of white labour, by the introduction of Italian farm-labourers under contract to work in the sugar-plantations for a number of years, was a failure. Japanese immigrants have also been introduced.

The area under cane for the years specified was as follows :—

Colony.	1864.	1871.	1881.	1891.	1896.
	acres.	acres.	acres.	acres.	acres.
New South Wales.....	22	4,394	12,167	22,262	31,053
Queensland.....	94	9,581	28,026	50,948	83,093
Total	116	13,975	40,193	73,210	114,146

The progress of the industry has been very rapid, especially in Queensland, the area of suitable land in that colony being very large. The area given above includes all the cane planted, whether cut during

the year or not. The following table shows the acreage actually cut during the last five years :—

Colony.	1892.	1893.	1894.	1895.	1896.
	acres.	acres.	acres.	acres.	acres.
New South Wales..... ...	11,560	11,755	14,204	14,398	18,194
Queensland.....	40,572	43,670	49,839	55,771	66,640
Total	52,132	55,425	64,043	70,169	84,834

From returns published by some of the Queensland mills it has been estimated that the total production of cane in 1896 was about 832,000 tons. This would give an average yield of 12·5 tons per acre for that colony, as compared with 17·6 tons per acre in New South Wales. The yield of sugar per ton of cane varies, of course, with the density of the juice, but in ordinary seasons it may be set down at something over 9 per cent.

The production of sugar from cane crushed during the last five years was as given below. The figures are compiled from the returns made by the mill-owners, and in the case of Queensland it is possible that they show something less than the actual production :—

Colony.	1892.	1893.	1894.	1895.	1896.
	tons.	tons.	tons.	tons.	tons.
New South Wales.....	24,289	23,930	22,638	19,740	28,557
Queensland.....	61,368	76,147	91,712	86,255	100,774
Total	85,657	100,077	114,350	105,995	129,331

The net import of sugar by each colony in 1896 is given in the subjoined table. Queensland was the only province which was able to fill its own requirements and spare a quantity of sugar for export. The surplus amounted to 75,325 tons, valued at £862,072, and was almost wholly exported to the other colonies, only 72 tons being shipped to other countries. The following figures, which include the 75,253 tons from Queensland, represent the quantity and value of sugar imported :—

Colony.	Quantity.	Value.
	tons.	£
New South Wales	33,894	458,828
Victoria	53,706	638,703
South Australia	11,299	132,664
Western Australia	6,392	92,685
Tasmania	6,213	92,850
New Zealand	34,287	412,511
Australasia	145,791	1,828,241

Deducting the export of Queensland, the imports from countries outside of Australasia amounted to 69,793 tons, of which 69,715 tons, of the value of £895,668, can be traced to the original countries of shipment, namely :—

Country.	Quantity.	Value.
	tons.	£
Mauritius	21,017	307,554
Fiji	25,248	256,552
Java	16,853	237,126
Hongkong	5,047	72,489
Other sugar-producing countries	1,550	21,947
Total	69,715	895,668

The total value of the sugar crop and the average return per acre, in the sugar-growing colonies of Australia, will be found below for the year 1896 :—

Colony.	Value of Cane grown.	Average value per acre.
	£	£ s. d.
New South Wales	164,161	5 5 9
Queensland	398,942	4 16 0

In connection with the prospects of this important industry, the present duties levied on raw sugar are worth recording. They are as follow :—New South Wales, £3 per ton ; Victoria, £5 15s. to £6 per ton ; Queensland, £5 per ton ; South Australia, £3 per ton ; Northern Territory, £5 per ton ; Western Australia, free ; Tasmania, £6 per ton ; New Zealand, £4 13s. 4d. per ton.

Sugar-beet.

The question of cultivating the beet-root for the production of sugar, which is now receiving a good deal of attention in Victoria, is not altogether a new one in the history of that colony, for as far back as thirty years ago experiments in this direction were made both on the Government farms and by private growers, and the results obtained were deemed to be so satisfactory that it was confidently predicted by the Melbourne press at the time that in a few years the industry would be established on a permanent basis. But the great hopes which were then entertained were not fulfilled, and in 1874 the Secretary for Agriculture reported that the sugar extracted from roots grown experimentally amounted to 7·09 per cent.—a yield which he

considered too low to permit of the establishment of a profitable industry. The history of the cultivation of the beet for sugar, however, has been one of steady progress since the discovery of the saccharine properties of the root in 1747. In Germany, for example, the percentage of sugar extracted from the beets grown in that country averaged but 5·50 per per cent. in 1836, while at the present time the yield is nearly 14 per cent., the increase having been most regular. To the great improvements in the machinery employed in the mills where the beets are treated this notable advance has been most largely due, but to a not inconsiderable extent it is also attributable to the application of science to the cultivation of the root. Under such circumstances as these, the opinion promulgated in the report of the Secretary for Agriculture could not be taken as unfavourable to the prosecution of experiments in Victoria, and a continuation of the efforts of the Department of Agriculture has led to the excellent result of an average yield of 18·10 per cent. of sugar obtained from sixty-four samples of beets grown on the Government experimental farms during the year 1893–4, while roots privately grown have been declared by the Agricultural Chemist to contain 22½ per cent. of sugar.

Such high yields as these have forced the conclusion that these colonies are fitted by nature to become the home of the sugar-beet. Indeed, in New South Wales, analyses made by the Chemist to the Colonial Sugar Refining Company of roots grown in the New England district, where experiments were conducted, disclosed yields ranging from 15·66 to 24·75 per cent. of sugar. There is little fear, therefore, that with proper care and attention, the cultivation of the beet will not produce good results; also, unlike the sugar-cane, the beet is a true agricultural product, and not only does not exclude other crops from the land but on the contrary invites them, and, as general experience has proved, leads to their greater production by vastly increasing the fertility of the soil. The one thing necessary to ensure success is the establishment of large mills for the production of beet sugar, according to the most modern principles. To attempt to start the industry on a small scale is to invite failure, for the cost of production would be too high. The Victorian Minister of Agriculture, in a report on the prospects of establishing the beet-sugar industry, issued at the end of 1894, made this clear, and estimated that with a 300 day-ton factory the financial results would be satisfactory, while with one of greater capacity the cost would be correspondingly reduced. The question is not only one of importance to Victoria, which now imports all its sugar, and, be it remembered, imports it most largely from countries outside Australasia, but to the other colonies as well. At the present time, when the growing of sugar-cane in New South Wales and Queensland is an important industry, the production is by no means equal to the wants of the people of Australasia, and there is therefore sufficient scope for the immediate cultivation of the beet-root for the extraction of sugar.

On the 6th March, 1896, the Victorian Parliament passed an Act empowering the Government to assist in the establishment of the sugar-beet industry by granting loans to duly registered public companies which might be formed for the purpose of erecting mills and equipping them with the necessary machinery and plant for the extraction of sugar from the roots. The company applying for aid must satisfy the Treasurer of the colony that there is an area of not less than 10,000 acres which is suited to the growth of sugar-beet situated within a radius of 10 miles of the site of the proposed factory; that it has contracted with the owners or occupiers of this land that an aggregate area of not less than 2,000 acres shall be devoted to the growth of beets for a period of three years; that the proposed works will be of a capacity sufficient to allow of the treatment of not less than an average of 300 tons of roots per day; that for a period of three years from the date of commencing manufacturing operations it will keep its works going to the full extent of their average capacity; and that it will not employ Asiatic labour nor other coloured labourers born outside of Australasia. If the Treasurer is satisfied that these conditions are likely to be fulfilled, and that the company has a paid-up capital of not less than £20,000, he is authorised to advance to the company a sum not exceeding twice the amount raised by its shareholders. This advance is to be made in instalments, and one instalment must be properly expended before another is paid over. Repayment of the loan must be made to the State in forty-six half-yearly instalments, commencing two years after the first part of the loan has been received; and of each half-yearly instalment paid to the State, part must be applied to meet interest-charge at the rate of 4 per cent. per annum on the outstanding loan, and the balance placed to a sinking fund, and held towards the redemption of the principal sum. The company is also required to pay the expenses incurred by the Treasurer in administering the Act so far as this relates to its own advance.

As a result of these concessions a company was formed in Victoria, and the first campaign of their factory at Maffra was completed at the end of June, 1898. The results obtained have, for various reasons, proved somewhat disappointing. The season, to begin with, was the reverse of favourable for the proper development of the beets. Shortly after planting, a period of extreme dryness was experienced, and when at length the rain came it caused too great a development of "tops" at the expense of the proper saccharine qualities of the roots. Then, again, it appears that the sugar-producing capabilities of beets grown in new land are vastly inferior to those of roots taken from land which has been in cultivation with this crop for some years. In Germany, the factories refuse to accept first crops of beets for this reason. There were other difficulties to be contended with, such as excessive cost of cartage owing to the bad state of the roads, high rates of wages to factory hands, and incapacity of some of the employés. However, the sugar produced—amounting to 600 tons—reached a standard of purity of

99·9, while the average for the campaign was 99·8. A ready market can be found for the sugar at £20 to £21 10s. per ton. In August, 1898, the Government of Victoria were called upon to assist the company by an advance of £13,000, in addition to the sum of £50,000 to be advanced under the provisions of the Act of 1896.

In New South Wales, although, as already stated, portions of the soil, particularly in the New England district, have been demonstrated to be admirably adapted to the cultivation of beet of excellent saccharine properties, no systematic effort has yet been made towards the establishment of the sugar-beet industry on a commercial basis.

Tobacco.

The cultivation of the tobacco-plant has received attention in the three eastern colonies. The following table shows the area and production of tobacco at various periods :—

Year.	New South Wales.		Victoria.		Queensland.		Australasia.	
	Area.	Production.	Area.	Production.	Area.	Production.	Area.	Production.
	acres.	cwt.	acres.	cwt.	acres.	cwt.	acres.	cwt.
1861	224	2,647	220	2,552	..	.....	444	5,199
1871	567	4,475	299	2,307	44	.....	910	6,782
1881	1,625	18,311	1,461	12,876	68	521	3,154	31,708
1888	4,833	55,478	1,685	13,355	123	1,418	6,641	70,251
1891	886	9,314	545	2,579	790	7,704	2,221	19,597
1892	848	8,344	477	658	318	3,808	1,643	12,810
1893	854	10,858	1,057	8,952	475	4,577	2,386	24,387
1894	716	8,132	1,412	7,155	915	9,571	3,043	24,858
1895	1,231	10,548	2,029	15,223	1,061	7,511	4,321	33,282
1896	2,744	27,468	1,264	7,890	994	8,629	5,002	43,987

Owing to over-production and the want of a foreign market, the area devoted to tobacco-culture greatly declined from 1888 to 1892, but since the latter year the industry has again shown signs of development. The Australasian tobacco-leaf has not yet been prepared in such a way as to find acceptance abroad, and until such is accomplished it will be useless to expect the cultivation of the plant to become a settled industry. The soil and climate of Australia appear to be suitable for the growth of the plant, but sufficient care and skill have not been expended upon the preparation of the leaf. The quantity of 70,251 cwt. of leaf produced in 1888 was so greatly in excess of local requirements that very low prices only could be obtained, and a large portion of the crop was left upon the growers' hands. The result was that many farmers abandoned the cultivation of tobacco, so that the area under this crop during 1889 was only 3,239 acres in New South Wales, and 955 acres in Victoria, producing respectively 27,724 cwt. and 4,123 cwt. of leaf—less than half the crop of the previous

year. In 1891 the area showed a further decline in the case of New South Wales and Victoria. In the mother colony this decline continued until 1894; but in Victoria and Queensland the smallest area devoted to the crop was during the season 1892. The year 1895 saw a great increase in the cultivation of tobacco in all three colonies, and in New South Wales in 1896 there was again a large extension of the area under the plant, although in Victoria and Queensland the advance made in 1895 was not maintained. In the mother colony the production amounted to 27,468 cwt., as compared with 10,548 cwt. in 1895, and 8,132 cwt. in 1894. For Victoria the production of 15,223 cwt. of leaf in 1895 was the highest in the history of the province, but it fell in the following year to 7,890 cwt., the area having decreased by 765 acres. In Queensland the yield of 8,629 cwt. in 1896 was only exceeded in 1894, although the area in cultivation was rather less than in 1895.

The average production of tobacco per acre for the ten years ended 31st December, 1896, was as follows:—

	Cwt.
New South Wales	10·4
Victoria	6·0
Queensland	8·7
Australasia	8·7

The following table shows the production per acre in foreign countries for the latest available period; but the comparison with Australasia, the figures for which refer to the ten years ended 1896, is not of much value, as the acreage under tobacco in these colonies is but small:—

Country.	Cwt. per acre.	Country.	Cwt. per acre.
Germany	17·1	Japan	8·0
Holland	15·5	Turkey	7·8
Russia	13·6	Manilla	7·4
Austria	12·0	Brazil	7·0
France	11·8	United States	6·6
Italy	10·5	India	5·9
Hungary	10·0	Roumania	4·5
West Indies	8·8	Algeria	3·3
Java	8·4	Australasia	8·7

The Agricultural Department of Queensland is endeavouring to assist the tobacco-growers by the importation of American seed of first quality, suited to the Queensland climate, and, following the example set by Victoria and New South Wales, the services of an American expert have been secured. New Zealand, also, has commenced the cultivation of tobacco, but so far it is only in the nature of an experiment; and a

small area has been planted in the Northern Territory of South Australia. In 1897 the Victorian Government decided to grant a bonus of 3d. per lb. on all tobacco-leaf of approved quality grown in the colony, and cured and shipped under the supervision of the tobacco expert. The bonus is only payable to the actual grower of the leaf, and 3 tons have been assigned as the maximum quantity for which payment will be made to any one grower or association.

The following table shows the imports of tobacco, cigars, and cigarettes for home consumption during 1896 :—

Colony.	Quantity.
	lb.
New South Wales	1,883,564
Victoria	1,809,497
Queensland	750,191
South Australia	636,612
Western Australia	710,099
Tasmania	297,876
New Zealand	1,548,107
Australasia	7,635,946

The total value of the tobacco crop and the average gross return per acre in the Australian colonies, during the year 1896, are given below :—

Colony.	Total value of crop.	Average value per acre.
	£	£ s. d.
New South Wales	41,202	15 0 4
Victoria	15,780	12 9 8
Queensland	17,258	17 7 3
Australasia	74,240	14 16 10

Gardens and Orchards.

The cultivation of fruit in Australasia does not attract anything like the attention it deserves, although the soil and climate of large areas in all the provinces are well adapted to fruit-growing. Still, some progress has been made, especially of recent years. In 1891 and 1896 the proportion of the total cultivation allotted to fruit was 2·1 per cent., while in 1881 the proportion was 1·5 per cent. The area per 1,000 persons in 1896 was 42·8 acres; in 1891, 36 acres; and in 1881, 29·4 acres. Grapes, oranges, apples, pears, and peaches are the

principal fruits grown; but with an unlimited area suitable for fruit-cultivation, and with climatic conditions so varied, ranging from comparative cold in New Zealand and on the high lands of New South Wales and Victoria to tropical heat in Queensland, a large variety of fruits could be cultivated. The industry, however, languishes partly on account of the lack of skill and care on the part of the grower, good fruits commanding high prices, while those placed within the reach of the multitude are generally of lower quality; and partly owing to the lack of means of rapid transit to market at reasonable rates. The inferior quality of much of the fruit produced was due to the ravages of fruit pests. The pests were almost wholly imported from Europe and America on fruit and cuttings, and as the orchards of Australia were threatened, and the fruit industry likely to be seriously interfered with, Acts have been passed in all the colonies prohibiting the importation of diseased fruit. The result of this legislation has been wholly beneficial, and if supplemented by legislation aimed at eradicating diseases existing in the orchards themselves, the future of the fruit industry would be assured. The area under orchards and gardens in 1881, 1891, and 1896 was as follows:—

Colony.	1881.		1891.		1896.	
	Acres.	Percentage to total area under Crops.	Acres.	Percentage to total area under Crops.	Acres.	Percentage to total area under Crops.
New South Wales	24,565	4·3	40,116	4·7	56,885	3·4
Victoria	20,630	1·4	37,435	1·8	45,734	1·7
Queensland	3,262	2·8	9,758	4·0	10,399	3·3
South Australia	9,864	0·4	14,422	0·7	18,415	0·8
Western Australia	.....	...	.....	...	2,736	2·5
Tasmania	6,717	4·5	10,696	6·4	11,753	5·1
New Zealand	16,360	1·5	29,235	2·0	39,215	2·5
Australasia	81,398	1·5	141,662	2·1	185,137	2·1

With the extension of artificial irrigation and the increased facilities for export afforded by the adoption of cool chambers for the preservation of fruit during long voyages, the orchardists of Australasia are now enabled to compete with foreign States in the fruit supply for the English market, which averages about £8,000,000 in value annually. The Tasmanian fruit trade with England has passed the experimental stage, and every season large steamers visit Hobart to receive fruit for the home market; while over 35,000 cases of oranges have been shipped by New South Wales to England during the first seven months of 1898.

The following table shows the import and export trade of each colony in green fruit and pulp for 1896, from which it will be seen that

Tasmania is, as yet, the only colony whose export largely exceeds its import :—

Colony.	Imports.	Exports of Domestic Produce.
	£	£
New South Wales	261,297	100,092
Victoria	71,149	31,721
Queensland	68,308	67,013
South Australia	18,628	19,411
Western Australia	13,402	.....
Tasmania	9,398	139,902
New Zealand	89,803	1,333
Australasia	531,985	359,472

The total value of the produce of gardens and orchards and the average return per acre in 1896 were as given below :—

Colony.	Total Value of Crop.	Average value per acre.
	£	£ s. d.
New South Wales	470,350	8 5 5
Victoria	929,035	20 6 4
Queensland	255,598	24 11 7
South Australia	380,240	20 12 11
Western Australia	49,615	18 2 8
Tasmania	176,295	15 0 0
New Zealand	859,822	21 18 6
Australasia	3,120,955	16 17 2

The average returns per acre have but little value for purposes of comparison, as much depends on the proportion of the areas under certain kinds of fruit and under vegetable gardens, which tends to increase or decrease, as the case may be, the general average of a colony. In New South Wales the smallness of the average is explained by the fact that in a great number of instances, owing to a lack of facilities for disposing of the fruit crops, the produce of the orchards did not reach the markets, and in some cases was not even gathered. In Tasmania stone fruits are principally grown, and the gross returns from these are much smaller than the returns obtained from the cultivation of sub-tropical fruits such as the orange and citron, which tend to increase the average returns in the continental and northern provinces.

Minor Crops.

Besides the crops already specifically noticed, there are small areas on which are grown a variety of products, chiefly rye, bere, onions, beans, peas, turnips, rape, mangold wurzel, and hops ; but they are not

sufficiently important to warrant special mention, except turnips and rape in New Zealand, where no less an area than 472,275 acres was planted with these crops. The area under minor crops in each province in 1896 was as follows :—

Colony.	Acres.
New South Wales	7,356
Victoria	33,425
Queensland	4,947
South Australia	7,455
Western Australia	221
Tasmania	20,765
New Zealand	497,964
Australasia	572,133

In 1896 there were 138 acres under coffee in Queensland, with an average production of 70 lb. to the acre; and the returns for 1897 show that the area had increased to 311 acres, with an average production of 262 lb. per acre. Small quantities of cotton, also, are grown in Queensland; and it has been found that heavy crops of cotton can be raised at the Pera Artesian Settlement in New South Wales. In 1897 the South Australian Government granted a lease of Bathurst Island, comprising an area of 500,000 acres, to a syndicate, which proposes to plant india-rubber trees on a large scale.

Dissemination of Agricultural Knowledge.

Although considerable progress has of late years been made in some directions, yet it must be admitted generally that agriculture in the Australasian colonies has only now passed the tentative stage. The typical Australian agriculturist, relying largely on a bountiful Nature, does not exercise upon his crops anything approaching the same patience, care, and labour that are bestowed by the European cultivator, nor as a rule does he avail himself of the benefits of scientific farming and improved implements to the extent that prevails in America and Europe. It may be expected that improvements will take place in this respect, and that the efforts made by the Governments of the various colonies for the promotion of scientific farming will bear good fruit. In most of the provinces, agricultural colleges and model farms have been established, and travelling lecturers are sent to agricultural centres. At present New South Wales possesses the Hawkesbury Agricultural College and experimental farm, and the experimental farms at Wagga, Wollongbar, Bathurst, Coolabah, and the Pera Bore. Victoria has the two agricultural colleges of Dookie and Longerenong, with experimental farms attached to them, and another farm at Framlingham, together with a viticultural college at Rutherglen. South Australia has an agricultural college and experimental farm at Roseworthy. The Queensland Government established an agricultural college and farm at Gatton in 1896. By a change

in the distribution of the money voted for State scholarships, four bursaries have been allotted, entitling the holders to free board and instruction for a period of three years as resident students of the college. New Zealand possesses an agricultural college and an experimental farm at Lincoln, in Canterbury.

In New South Wales experimental cultivation by means of irrigation with artesian and catchment water has been successfully conducted at some of the tanks and bores owned by the State, notably at the Pera Bore. In South Australia a central agricultural bureau in Adelaide, with about eighty branch bureaus in the country, assists the farmers by disseminating valuable information, publishing papers, introducing new economic plants, and improving the breed of dairy cattle. A State school has been established in Adelaide for the purpose of affording instruction to "secondary agricultural pupils." The fees paid by the scholars, who must be over 13 years of age and have passed the compulsory examination, are at the same rate as those paid in the ordinary State schools. In Tasmania, the Council of Agriculture gives valuable advice to farmers concerning improved methods of agriculture, extermination of insect pests, etc.; while Western Australia possesses seventeen agricultural halls subsidised by the Government, where the latest literature of interest to farmers may be examined, and where lectures are delivered on agricultural subjects.

Agricultural Bonuses.

Although the Government of Queensland has encouraged the shipment of dairy produce by granting a bonus not exceeding 2d. per lb. on butter and 1d. per lb. on cheese exported to markets outside of Australasia, and although South Australia granted a similar bonus on the exportation of butter from October, 1893, to February, 1895, Victoria is the only colony which has endeavoured to stimulate the agricultural industry during the past few years by the introduction of the bonus system on an extensive scale. In that colony Parliament authorised the expenditure of about a quarter of a million in encouraging the cultivation of various crops, the manufacture of the raw material, and the exportation of certain of the products to foreign markets; and about £200,000 had been paid away in April, 1898. The results, of course, have not been uniformly successful; the production and exportation of some articles, such as butter, have greatly increased; but in the case of other products, some of which were entirely new to the country, the progress made has been but small.

To growers of grapes, fruits, and general vegetable products the sum of £55,000 was authorised to be given as bonuses. The grants for vine and fruit cultivation, amounting to £30,000, were allotted before the period fixed by Parliament expired, the applications approved numbering 1,549 for planting an area of 12,500 acres of vines, and 1,588 for planting

8,308 acres of fruit-trees. These grants have been supplemented, and the expenditure has now reached a sum of £40,526. For the cultivation of general vegetable products, to be used for the manufacture of fibre, oil, paper, syrup, sugar, tannin, drugs, dyes, scents, and insecticides, the balance was available. The bonus payable was not to exceed the sum of £2 for each acre sown or planted, and no payment was to be made for less than 1 acre of sugar plants, half-an-acre of fibre plants, and a quarter of an acre of the other plants named. The amount paid on account of the growth of general vegetable products is £5,729.

A grant of £37,000 was made to factories engaged in fruit-canning, fruit-drying, dairying, raisin and currant making, and in the preparation of flax, hemp, silk, and other products for the manufacturer. To factories for the preservation of fruit a bonus of £100 was allowed for canning, drying, or bottling 20 tons of fruit, and £3 for each additional ton, but the total payment to any person or company was not to exceed £300. The grants to butter factories and creameries were, it is stated by the Department of Agriculture, in every way an unqualified success. While the system was in operation the total expenditure amounted to £30,388. To raisin, currant, fig, and prune factories a bonus was granted of £5 per ton of dried fruit up to 20 tons, and the payments on this account amounted to £6,852. The quantity of raisins prepared for market last season was 564 tons, of which 29 tons were exported during 1897, and the colony is now in a fair way of becoming independent of importations of this fruit; little, however, has been done in the cultivation of currant vines. To vegetable oil factories, a bonus of 1s. per gallon was payable on almond, castor, colza, earth-nut, linseed, olive, sesame, and sunflower oils; but the maximum amount which might be granted to one person or company on account of the production of any vegetable oil was not to exceed £500. A bonus of £5 per ton was payable on fibre manufactured from flax or hemp, the largest sum given to one person or company being £100; to sugar factories, a bonus of £100 for 20 tons of sugar or syrup made from sorghum or beet, with £5 for every additional ton up to a total of £500; to insecticide factories, a bonus of £40 for not less than 1 ton of insect-destroying powder manufactured from artemisia, pyrethrum, or schkuhria, and £20 for each additional ton up to a maximum of £100; and to tobacco factories, a bonus of £50 for 2,000 lb. weight of tobacco, with £5 for each additional 200 lb., but the total amount payable to one person or company was limited to £500.

A grant of £79,000 was originally made for payment in bonuses for the export of dairy produce, fruits, and honey to foreign markets, and for the development of the wine industry; and this amount has been supplemented from time to time. The bonus on the export of butter has now been discontinued, the industry being well established; likewise a bonus at the rate of £3 per ton which was payable on the export of cheese to ports outside the Australasian colonies, provided the price realised when marketed was not less than £2 10s. per cwt. There is still in existence a bonus on green fruit exported to foreign ports approved

by the Minister for Agriculture. The bonus cannot exceed 25 per cent. of the price realised by the fruit, nor in any circumstances be in excess of 2s. per case. On honey exported to approved ports outside of Australasia, a bonus of 1d. per lb. was payable, provided the honey arrived at the port of consignment in a good and marketable condition. The expenditure on account of these various products will be found in the table on the following page.

Towards the purchase and importation by the Department of Agriculture of new varieties of seeds and plants for distribution to farmers, a sum of £3,000 was granted. It was also decided that out of this sum the Minister might give a bonus not exceeding £200 to any person who had introduced into the colony a new and approved variety of plant, always provided that the person who introduced it had been able to supply the Department, if required, with 1,000 scions or plants of the new variety at a price not exceeding 6d. each. A few hundred pounds of this grant have been expended, and the system of seed distribution is declared to be in every way satisfactory. Seeds of the best-known varieties of sugar-beet grown in France, Germany, and Sweden have been purchased and distributed amongst the farmers; and in consequence of the discovery of phylloxera in the colony a large supply of seed and cuttings of American phylloxera-resistant vines was obtained. A portion of such supply was distributed amongst the vignerons; but the Government, acting on the advice of Baron von Mueller, decided to abandon the importation of the American varieties, as it was found that new diseases were introduced with them.

Approval was also given to the expenditure of a sum of £43,000 in establishing a system of technical education in the colony, by the employment of experts to impart instruction in connection with the introduction of new vegetable products and the improvement of existing agricultural methods. It was decided to engage experts in the culture of grape-vines; in wine-making; in the culture of fruit-trees; in the processes of drying, bottling, and canning fruits; and in the culture of plants producing fibre, paper, oils, tannin, drugs, dyes, scents, and insecticide. A grant of £4,000 was also made for the introduction of new machinery and appliances to perfect the treatment of new agricultural products and to improve existing agricultural methods, and for prizes for new inventions in general agricultural appliances. A sum of £11,000 was likewise granted for the publication of agricultural reports; and another of £1,000 to be paid in bonuses for the encouragement of planting and cultivating forest trees of an economic character, such as blackwood, maple, birch, hickory, cedar, camphor-tree, cypress, pine, gum and ironbark, beech, ash, silky-oak, walnut, juniper, plane, poplar, oak, willow, redwood, and elm. Young trees are supplied gratis by the Forest Division of the Lands Department, and a bonus not exceeding £2 per acre is granted for planting and maintaining them in a vigorous and healthy condition. So far, however, the results have been disappointing.

The following table represents the amount of disbursements by way of bonuses in Victoria up to the 13th of April, 1898 :—

Bonus for—	Amounts paid.	When lapsed.
	£ s. d.	
Growth of general vegetable products	5,729 0 0	31 Dec., 1896.
Growth and cultivation of forest trees	15 17 6	Still in force.
Growth of vines and fruit-trees	40,526 12 6	.....
Establishment of Factories—		
Vegetable oil	106 16 6	Still in force.
Fruit canning and drying	590 7 10	30 June, 1897.
Butter and creameries	30,387 16 2	30 ,, 1894.
Raisins, currants, figs, and prunes	6,852 8 5	30 ,, 1895.
Insecticide	34 10 0	30 ,, 1895.
Tobacco	737 16 6	30 ,, 1895.
Flax and hemp	315 6 7	Still in force.
Export of butter	103,691 0 4	30 June, 1893.
Export of cheese	1,499 5 0	30 ,, 1895.
Export of honey	506 2 4	30 ,, 1896.
Export of green fruit	4,407 7 0	Still in force.
Establishment of wineries	4,000 0 0	Still in force.
Total	£199,400 6 8	

A sum of £60,000 is still available in connection with the vote granted in aid of the sugar-beet industry. For the financial year 1898–9, it is proposed by the Government to expend £150,000 in assisting the agricultural industry, including £17,500 for the encouragement of the cultivation, manufacture, and export of fruit, tobacco, flax, hemp, and silk ; and £32,500 for the development of the export trade ; in addition to £50,000 for new freezing works, £20,000 for district co-operative wineries, and £30,000 for dairy schools and agricultural education.

Irrigation.

Originally cultivation in Australia was confined to the banks of the coastal rivers and the country near the sea, and within the influence of regular rainfall ; but now that it has spread from the coastal districts and the adjacent table-lands to the interior of the continent, where the irregular character of the rainfall makes harvesting uncertain, irrigation has become necessary to ensure successful husbandry. But the most important function of irrigation, so far, has been to provide supplies of fodder in pastoral and farming districts ; landholders who thus made use of irrigation, in connection with ordinary agricultural and pastoral pursuits, during the recent unfavourable seasons, have benefited largely by so doing. For some years past small areas have been irrigated by private enterprise ; about 40,000 acres are irrigated in New South Wales and 7,000 acres in Queensland. In New South Wales patches of irrigated lucerne or other fodder crop are met with at intervals on all the western rivers, and occasionally on creeks also. Irrigated orchards and gardens are numerous. At Hay and Balranald,

Irrigation Trusts have been established under the control of the municipal councils. The Hay Trust comprises 2,880 acres, of which 778 acres, representing 62 holdings, have been applied for by settlers; and the Balranald Trust comprises 2,900 acres, of which a small area only has so far been irrigated. There was also a similar Trust at Wentworth, having a jurisdiction over 10,600 acres, but it has now been dissolved and its powers assumed by the Government, who have carried out the undertaking. In Victoria, in 1897, there existed fifteen works controlled by Waterworks Trusts in rural districts, twenty-nine works controlled by Water Supply and Irrigation Trusts in rural districts, and four works similarly controlled in urban districts, or a total of forty-eight, which may properly be classed as Irrigation Trusts. The jurisdiction of these Trusts extends over a very large tract of country; but while the area capable of being irrigated is enormous, it is estimated that only about 117,500 acres were actually irrigated in 1895. The works constructed are in various districts, chiefly on the Goulburn, Loddon, Wimmera, and Avoca Rivers. The total amount advanced by the State to the various Trusts, at the end of 1896, in order to enable them to construct the necessary works, was £995,020.

A few years ago a special Act was passed by the Victorian Legislature, enabling the Government to hand over to the firm of Chaffey Brothers an area of 250,000 acres of mallee scrub, situated at Mildura, in the Swan Hill district, about 340 miles north-west of Melbourne. The land was then uninhabited and practically valueless; but now it has grown into a colony with about 4,000 inhabitants. The Act obliged the promoters to spend £35,000 on the land within the first five years, but they actually expended £275,000 within less than four years, and thus became entitled to the freehold of 50,000 acres, holding the balance of the 250,000 acres on lease. In addition to the sum mentioned, the settlers have spent large sums in improving the land. The raisin industry is so far the leading one at Mildura, but all kinds of fruit grow to perfection. At the end of 1897, the total area under irrigated culture was 9,200 acres, of which 1,200 acres were under fodder plants, and 8,000 acres under orchards and vineyards. It is estimated that the total value of fruit, etc., produced for export in 1897, was £61,000, and for local use, £4,000.

In October, 1888, the firm of Chaffey Brothers commenced operations in South Australia, at a place called Renmark, situated on the river Murray, close to the boundary of New South Wales, and about 70 miles below Mildura, where an area of 250,000 acres has been set apart for irrigation purposes, and although Renmark has not progressed so rapidly as Mildura, it promises in time to become an important settlement. Unfortunately, Chaffey Brothers have had to go into liquidation; but an arrangement has been arrived at, under which the settlers, both at Renmark and Mildura, are able to continue their operations.

In New South Wales matters are in a more backward state. The Water Conservation Branch attached to the Department of Works

obtained sufficient hydrographical data to form the basis of a scheme of irrigation for vast areas in the vicinity of the Murray, Murrumbidgee, Lachlan, Macquarie, and Darling Rivers. The basin of the Gwydir River, the region between the Macquarie and the Bogan, and the country between the Paroo and Darling Rivers have been completed, the lineal measurements over which levels were taken extending to no less than 17,180 miles. In June, 1896, the Government secured for one year the services of the eminent authority on irrigation, Colonel Home, C.S.I., who has submitted a report on the subject of water conservation and irrigation in this colony. His report endorsed the conclusion previously arrived at that the Murray and the Murrumbidgee are the only rivers which carry sufficient supplies of water to warrant the construction of large irrigation works. He further gave the opinion that even these rivers require to have their supplies supplemented in summer with the aid of large storage reservoirs. Colonel Home considered that the scheme for a canal from the south side of the Murrumbidgee is the most promising, and he recommended that this should be taken up first. The preparation of this project is now in an advanced stage.

Artesian Wells.

The necessity of providing water for stock in the dry portions of the interior of the Australian continent induced the Governments of the colonies to devote certain funds to the purpose of sinking for water, and bringing to the surface such supplies as might be obtained from the underground sources which geologists stated to exist in the tertiary drifts and the cretaceous beds which extend under an immense portion of the area of Central Australia, from the western districts of New South Wales to a yet unknown limit into Western Australia.

In New South Wales the question of the existence of underground water had long been a subject of earnest discussion, but doubts were set at rest in 1879 by the discovery on the Kallara Run, at a depth of 140 feet, of an artesian supply of water, which, when tapped, rose 26 feet above the surface. The Government then undertook the work of searching for water, and since the year 1884 the sinking of artesian wells has proceeded in a scientific and systematic manner, under the direction of specially-trained officers. Private enterprise, which had shown the way, has also followed up its first successes.

Contracts have already been let by the Government of New South Wales for the sinking of eighty-three wells; of these, sixty-five have been completed, ten are in progress, and the others will be commenced at an early date. Of the completed wells, forty-two are flowing, sixteen sub-artesian, yielding pumping supplies, and seven have been failures; these wells represent 104,518 feet of boring, while with the uncompleted wells the total depth bored has been 126,905 feet. From the completed wells about 28,000,000 gallons of water flow

every day to the surface. The deepest bore completed is that at the Dolgelly, on the road from Moree to Boggabilla, where boring has been carried to a depth of 4,086 feet; this well yields a supply of approximately 745,200 gallons per diem. The largest flow obtained in the colony is from the Euroka Bore, about 12 miles from Walgett, on the Coonamble road; the depth of this well is 1,543 feet, and the estimated flow about 3,000,000 gallons per diem. Another important bore is that at Pera, 8 miles from Bourke, on the Wanaaring road, where at a depth of 1,154 feet a flow of 610,000 gallons per diem was struck. At this bore the most extensive system of irrigation by artesian water as yet undertaken in the colony is being carried out; the land has been surveyed into 20-acre blocks, which are leased under the Homestead Settlement provisions of the Crown Lands Act, with a water right equivalent to 35 inches of rain per annum. An area of 57 acres has been set apart for experimental cultivation by the Government, and certain fruits and other products indigenous to the temperate and torrid zones are being grown with success. Equally good results have been obtained at Native Dog, Barringun, Enngonia, and Belalie bores, on the road from Bourke to Barringun. Lucerne, maize, wheat, tobacco, millet, planter's friend, sugar-cane, date palms, pineapples, bananas, and many other fruits and vegetables of tropical and subtropical character have been found to thrive there exceedingly well.

On the road from Wanaaring to Milparinka, once a waterless track, successful boring operations have been carried on. Seven bores have been completed. Three of these give a pumping supply, and four are flowing, yielding an aggregate supply of 3,000,000 gallons daily. Boring operations are being extended farther to the north-west, and the country is now being tested to the north of Tibooburra, at the Warri Creek, almost on the Queensland border. A remarkable flow has also been obtained at the Moree bore, amounting to 1,500,000 gallons daily. This bore has been carried to a depth of 2,792 feet, through formations of the same age as the Ipswich coal measures (*Trias Jura*), thus demonstrating the fact that water can be obtained in other than the lower cretaceous formation. It is interesting to note that at Tineroo bore, on the Milparinka-Wanaaring Road, a similar formation is thought to have been met with at 1,703 feet (flow, 800,000 gallons); thus, if further investigation bears out the surmise, its discovery in this locality will tend to confirm the opinion of the Government Geologist, that the Triassic may extend across the colony and as far as the Leigh Creek coal-beds in South Australia, underlying the cretaceous beds in which so much water has been obtained.

Much has been done in the way of artesian boring by private enterprise. As far as can be ascertained, there are altogether 110 private bores in New South Wales, with an approximate flow of 40,000,000 gallons daily. Amongst the most important are two wells on Lissington Holding, with flows of 3,000,000 gallons per diem; and one at Lila Springs, also with a daily flow of 3,000,000 gallons.

A better idea of the value of artesian wells to the community will be obtained when it is known that the aggregate daily flow of underground water in New South Wales is now approximately 68,000,000 gallons, and that, in addition, large supplies can be pumped from sub-artesian wells. The average depth of the sixty-five wells completed by the Government is 1,607 feet 11 inches, with a range from 120 to 4,086 feet, and with temperatures varying from 80 to 139 degrees Fahrenheit. The total cost of the wells (including actual boring, casing, carriage, and incidental expenses) was £187,123 9s., or an average of £2,878 16s. 5d. per bore, or £1 15s. 9d. per foot.

The Queensland Hydraulic Engineer reports that, in the middle of the year 1897, twenty-one bores had been successfully completed by private contractors on Government account; while four others were found to give a sub-artesian supply, two were in progress, and eleven had been abandoned; the most copious being that at Charleville, where a daily supply of 3,000,000 gallons was obtained. The deepest bore is that at Winton, which reaches a depth of 4,010 feet; and the mean depth of the twenty-one bores is 1,833 feet. The total daily flow of these bores is given as 9,046,330 gallons. In addition to the Government wells, there were 323 private bores, giving an artesian supply aggregating 173,209,607 gallons per day. The deepest bore was Darr River Downs No. 4, viz., 4,000 feet; and the mean depth of 312 bores was 1,213 feet. The maximum flow of 4,000,000 gallons daily is obtained at No. 1 bore, Boatman. Sixty-seven bores give a sub-artesian supply; forty-two were in progress in the middle of 1897; and thirty-nine have been abandoned. At Back Creek and No. 3 Bore, Bingara, water of so low a temperature as 70 degrees Fahrenheit was flowing; while at Dagworth, the water had a temperature of 196 degrees. The mean temperature of the Government wells was 134 degrees, and of the private wells, 110 degrees.

At the end of 1897 the Water Conservation Department of South Australia had completed eighty-seven bores, of which, however, only thirty-three were successful. These are spread over widely-distant parts of the territory, successful bores existing at Nullarbor Plains, on the boundary of Western Australia; at Oodnadatta, the present terminus of the Northern Railway system; and at Tintinara, in the south-eastern extremity of the colony. The bore at Tintinara has proved the fact that the marine tertiary area is water-bearing. For purposes of water conservation, the colony may be divided into four large areas, which, together with the number of bores, are shown below :—

Division.	Successful Bores.	Unsuccessful Bores.	Total.
West Coast	3	9	12
Far North and North-west	13	19	32
Central Area	15	24	39
South-east	2	2	4
Total	33	54	87

Of the bores on the west coast, Robert's Well No. 1, on Nullarbor Plains, reaches a depth of 777 feet, and gives a daily supply of 68,000 gallons; the total supply from the three flowing wells being 133,000 gallons. Much greater depths have been reached in the far north; a well at Kopperamanna being the deepest in the colony, viz., 3,000 feet. This well gives a daily supply of 800,000 gallons. A well at Strangways, and another at Coward, give daily supplies of 1,200,000 gallons each—the maximum obtained in South Australia. Apart from a well at Corrie Appa, which had not been brought into use, but promised a very abundant supply, the twelve flowing bores in this division gave a daily outflow of 3,928,200 gallons. The wells in the central area are much less important, the largest supply, viz., 108,000 gallons daily, being obtained from one in the vicinity of Gawler. The deepest well in this division is situated at Percyton, which reaches 930 feet. The total daily supply in the central area amounts to 354,400 gallons. The two successful wells in the south-east have a daily outflow of 34,000 gallons, viz., 30,000 gallons at Emu Flat, at a depth of 268 feet; and 4,000 gallons at Tintinara, at a depth of 243 feet. The total daily supply for the whole colony reaches, therefore, 4,449,600 gallons. According to a report by the engineer-in-chief, it would appear that the South Australian Government had expended £19,202 on machinery and £148,689 in boring operations, or a total of £167,891, at the end of the year 1897.

The Government of Western Australia, following the example set by those of the eastern colonies, have sunk a number of wells in the direction of the Coolgardie gold-field, and of the South Australian border, and has let contracts for others. At the end of 1896, a well at the Perth station gave a daily supply of 400,000 gallons; and one at the Midland Junction, 266,000 gallons. Of completed private bores, the largest supply, 150,000 gallons daily, was yielded by a well at Guildford. The deepest completed well, viz., the one at Perth station, reached 800 feet.

In the province of Victoria the Government have since the year 1886 executed several experimental borings, but so far the results have not been encouraging. Artesian water was, however, struck at Sale, in Gippsland, as early as the year 1880, but the bore is not now used.

The fears so long entertained that the search for underground water might prove unsuccessful have now been dissipated by the results already attained, and both private firms and the State are emulating each other in extending their operations throughout the arid portions of the continent, meeting generally with the most pronounced success.

State Advances to Farmers.

The oldest system by which advances of money are made to farmers is probably that which was established, as early as 1770, by the German "Landschaften Bank"; and the principle, assuming different forms according to the circumstances of the countries into which it was

introduced, was gradually extended to the other great countries of Europe, with the exception of the United Kingdom, where an unwieldy system of land transfer, and the growing accumulation of large estates, form obstacles in the way of its successful application. Since 1849, mainly by the efforts of Raiffeisen, the German Land Credit Banks have taken the form of purely co-operative institutions, and in this respect they have been followed by Sweden, the Baltic provinces of Russia, and Poland, as well as, to some extent, by Austria-Hungary; but in most of the European countries the institutions may be classed as partly State and partly co-operative. In France alone is the system exclusively administered by the State; and it is the French *Credit Foncier* which has been adopted in Australasia wherever the idea of rendering financial aid to agriculturists has been carried into effect, namely, in the colonies of Victoria, South Australia, Western Australia, and New Zealand. In Tasmania a Bill to establish a land-credit bank is now before Parliament; and in New South Wales and Queensland the system has received some consideration.

In Victoria, a section of the Savings Banks Act of 1890 empowered the Commissioners to entertain applications for loans, and to lend sums of money on security by way of mortgage of any lands and hereditaments held in fee-simple free of all prior charges, quit-rents excepted, at such rate of interest as might, from time to time, be fixed by them. The conditions were not very liberal, but they endured for a number of years. Five per cent. was the rate of interest charged, and 2 per cent. was payable annually in redemption of the principal. Opportunity was taken in the Act for the amalgamation of the Savings Banks, assented to on the 24th December, 1896, to definitely grant advances to farmers under the land-credit system. On the 30th June, 1897, the total amount outstanding on loan under the old conditions was £176,696, representing advances to 425 farmers; and it is stated that all repayments which had become due in the three years during which the Act was in force prior to that date were made in full. Under the new Act the Commissioners of Savings Banks are empowered to assist farmers, graziers, market-gardeners, or persons employed in agricultural, horticultural, viticultural, or pastoral pursuits, by making advances, either by instalments or otherwise, upon the security of any agricultural, horticultural, viticultural, or pastoral land held by them, either in fee simple, or under a lease from the Crown in which the rent reserved is taken in part payment of the purchase money of the land demised by such lease. The Commissioners have the option of making such advances either in cash or in mortgage bonds; and it is provided that all advances, together with interest at the rate of 4½ per cent. per annum, are to be repaid in sixty-three half-yearly instalments, or such smaller number as may be agreed upon by the Commissioners and the borrower. From the commencement of the Act to the 21st September, 1897, the Commissioners received 1,440 applications for loans, aggregating a sum of £735,592. Of these, 266 were considered

unsuitable; 994, amounting to £505,592, were valued; and the remaining 180 were awaiting valuation. Of those valued, 206 applications, representing £108,732, were rejected; while 720, applying for £348,887, were granted to the amount of £341,498; and 68, applying for £47,973, were under offer to the applicants with amounts reduced to £43,230. The actual advances made during the financial year 1896–7 amounted to £108,350, viz., £67,090 on freehold, £24,460 on leasehold, and £16,800 on freehold and leasehold securities combined. The remaining applications which had been approved were awaiting the completion of the necessary deeds. To enable them to make the necessary advances, the Commissioners had sold Treasury bonds of the nominal value of £116,100, which realised £116,129.

The South Australian Parliament, on the 20th December of that year, passed the State Advance Act of 1895, providing for the establishment of a State Bank for the purpose of making advances to farmers and producers, to local authorities, and in aid of industries, on proper security, consisting either of lands held in fee simple or under Crown lease; the funds for this purpose to be raised by the issue of mortgage bonds guaranteed by the State. The rate of interest was to be a matter of arrangement between the bank and the borrower, the maximum being 5 per cent. per annum. To the 31st March, 1898, the South Australian State Bank, thus established, had advanced £372,520, and received repayments to the amount of £11,718. On that date there were arrears of interest to the amount of £94 outstanding; and £3,824 interest had accrued and become due on the 1st April. In order to enable these advances to be made, mortgage bonds had been sold to the amount of £370,200, of which £11,700 had been repurchased, leaving the amount current at £358,500. The advances made during the financial year 1896–7 amounted to £231,595; and during the nine months ended 31st March, 1898, £110,500.

In Western Australia the Agricultural Bank Act of 1894 authorised the establishment of a bank for the purpose of assisting persons in the occupation, cultivation, and improvement of agricultural lands. Under the provisions of the Act the manager of the bank is empowered to make advances to farmers and other cultivators of the soil on the security of their holdings in fee simple, or under special occupation lease, or under conditional purchase from the Crown, or under the Homestead Farms Act of 1893. The advances are granted either for the purpose of making improvements on unimproved holdings, or of making additional improvements on holdings already improved, and, under the original Act, could not exceed in amount one-half of the fair estimated value of the improvements proposed to be made. The maximum rate of interest chargeable was fixed at 6 per cent. per annum payable half-yearly, and it was provided that the largest sum to be advanced to any one person shall be £400. Repayment is made in half-yearly instalments of one-fiftieth of the principal sum, to commence on the 1st January or the 1st July next following the expiration of five years

from the date of the advance, until the whole amount is repaid with interest. Arrangements can, however, be made for the repayment of advances at shorter intervals, and in larger instalments. For the purposes of the Act, improvements were defined as clearing, cultivating, and ringbarking; but by an Amending Act passed in 1896 the term was extended so as to include fencing, drainage works, wells of fresh water, reservoirs, buildings, or any other works enhancing the value of the holding. The same Act raised the largest sum which can be advanced to £800, reduced the maximum rate of interest to 5 per cent., made provision for the acceptance of pastoral leases as security, and allowed advances to be made up to three-fourths of the estimated value of the proposed improvements. The capital allotted to the Agricultural Bank is £100,000; and to the 30th June, 1897, loans to the amount of £52,425 had been approved, of which sum £22,300 had been advanced to borrowers in progress payments, leaving £30,125 still to be paid. During the financial year 1896–7 loans to the amount of £34,325 were approved, and instalments to the amount of £15,279 paid. It is estimated that, for the sum of £22,300 advanced by the bank, improvements to the value of £45,793 have been effected, of which £34,670 represents clearing, and £7,262 cultivation; and that for the £30,125 approved but not yet paid, further improvements to the value of £58,393 will be made, of which £34,040 will represent clearing and £15,959 cultivation; the balance in both cases covering ringbarking, fencing, drainage works, wells, dams, and reservoirs, and farm buildings. It is stated that 485 separate properties have been improved by means of advances from the Agricultural Bank.

In New Zealand the Government Advances to Settlers Act of 1894 provided for the establishment of an Advances to Settlers Office, empowered to lend money on first mortgages of land occupied for farming, dairying, or market-gardening purposes, urban and suburban lands used for residential or manufacturing purposes being expressly excluded from the scope of the Act. At that time one class of loans only was contemplated, viz., loans on mortgage security, which were repayable by seventy-three half-yearly instalments, subject, however, to redemption at any time; but by an Amending Act passed in 1896 authority was given for the granting of fixed loans for any term not exceeding ten years. These loans can only be granted on freehold lands, and are repayable without sinking fund at the end of the period for which they are made. The amount advanced on fixed loan is not to exceed one-half the estimated value of the security; while under the instalment system the Board of Control has power to grant loans up to 60 per cent. of the realisable value of freehold securities, and up to 50 per cent. of the lessee's interest in leasehold securities. In both cases interest is fixed at the rate of 5 per cent. per annum, and the amount advanced cannot be less than £25 nor more than £3,000—the maximum under the 1894 Act having been £2,500. Instalment loans are repayable in 36½

years, in half-yearly payments, at the rate of 5 per cent. for interest and 1 per cent. in redemption of the principal sum. To the 31st March, 1898, the Board received 7,433 applications for loans, amounting to £2,512,648, of which 1,341, amounting to £419,433, were declined. Excluding cases pending on the date mentioned, 5,837 applications for loans, amounting to £2,028,445, were granted, this sum being reduced to £1,736,205. Of the applications granted, 698, involving an amount of £330,240, were declined by the applicants, owing to the reductions proposed by the Board, leaving an actual number of 5,139 applications, to the amount of £1,405,965, to be dealt with. The division of these grants is shown below. The figures include 134 fixed loans to the amount of £41,740, advanced on securities valued at £109,404 :—

Class of Security.	Applications Granted.	Amount Granted.	Value of Security.
	No.	£	£
Freehold	3,277	1,139,155	2,498,998
Leasehold	1,781	230,090	571,582
Freehold and Leasehold combined	81	36,720	81,191
Total	5,139	1,405,965	3,151,771

The amount actually advanced on mortgage to the 31st March, 1898, was £1,357,040 ; repayments amounting to £99,122 had been made ; so that the amount outstanding was £1,257,918. At that date there were instalments to the amount of £721 overdue ; interest receivable was overdue to the amount of £3,321 ; and interest to the amount of £15,769 had accrued. The capital of the Office was provided by a 3 per cent. loan for £1,500,000, which realised £1,394,103, and by an advance of £24,500 from the Consolidated Revenue Fund. During the financial year 1897–8, advances to the amount of £320,563 were made by the Office, and interest amounting to £45,791 paid ; while repayments of £71,187, and interest to the amount of £52,910, were received.

A Bill was introduced in the Tasmanian Parliament in June, 1898, for the purpose of establishing the system of land credit in that colony. The Bill provides for the appointment of Commissioners, who may come to the assistance of persons employed in agricultural, horticultural, viticultural, or pastoral pursuits, by making advances to them, either by instalment or otherwise, upon the security of any land held by such persons in fee simple as registered proprietors thereof under the provisions of the Real Property Act.

PASTORAL RESOURCES AND DAIRY INDUSTRY.

NOTWITHSTANDING the fact that the soil, climate, and indigenous herbage of Australasia are admirably adapted to the sustenance of animal life, no attempt was made to test the capabilities of the land as a feeding-ground for flocks and herds on a large scale until the example of Captain Macarthur had demonstrated beyond doubt that Nature favoured the production in Australasia of a quality of wool which was unsurpassed by that grown in any part of the world. Then the settlers began to understand and utilise the natural resources of the country; and as the indomitable spirit of exploration gradually opened up the apparently boundless plains of the interior, pastoralists extended their domain, and sheep and cattle in increasing numbers spread over the face of eastern Australia. Now the expansion of the pastoral industry is gradually converting the central and western portions of the continent into holdings devoted to the production of the greatest element of the wealth of Australasia.

The beginnings of pastoral enterprise in Australia were very humble. The live stock of the community which accompanied Captain Phillip comprised only 1 bull, 4 cows, 1 calf, 1 stallion, 3 mares, 3 foals, 29 sheep, 12 pigs, and a few goats; and although the whole of the present flocks and herds of Australasia have not sprung from these animals alone, yet the figures show the small scale on which the business of stock-raising was first attempted. No systematic record of the arrival of stock seems to have been kept in the early days of settlement; but it would appear that during the period between Governor Phillip's landing and the year 1800 there were some slight importations, chiefly of sheep from India. In 1800 the stock in Australasia comprised 6,124 sheep, 1,044 cattle, 203 horses, and 4,017 swine; while at the end of the year 1896 there were in these colonies no less than 111,083,519 sheep, 12,702,126 cattle, 1,926,787 horses, and 1,007,025 swine.

The following figures give the number of stock in Australasia at various dates up to 1851:—

Year.	Sheep.	Cattle.	Horses.	Swine.
1792.....	105	23	11	43
1800.....	6,124	1,044	203	4,017
1810.....	33,818	11,276	1,114	8,992
1821.....	290,158	102,939	4,564	33,906
1842.....	6,312,004	1,014,833	70,615	66,086
1851.....	17,326,021	1,921,963	166,421	121,035

The increase in the number of each kind of live stock since the year 1861 is illustrated in the following table :—

Year.	Sheep.	Cattle.	Horses.	Swine.
1861.....	23,741,706	4,039,839	459,970	362,417
1871.....	49,773,584	4,713,820	782,558	737,477
1881.....	78,063,426	8,709,628	1,249,765	903,271
1891.....	124,547,937	11,861,330	1,785,835	1,154,553
1896.....	111,083,519	12,702,126	1,926,787	1,007,025

The average number of sheep, cattle, horses, and swine per head of the population of Australasia at the same periods was as follows :—

Year.	Sheep.	Cattle.	Horses.	Swine.
1861.....	18·8	3·2	0·4	0·3
1871.....	25·3	2·4	0·4	0·4
1881.....	27·7	3·1	0·4	0·3
1891.....	31·8	3·0	0·5	0·3
1896.....	25·7	2·9	0·4	0·2

It will be seen that in 1861 there were 18·8 sheep for every person in Australasia, and that this number had increased to 31·8 in 1891. In 1896, however, in consequence of the dry seasons, and the demands made upon the flocks for the export trade, the average number had fallen to 25·7 per inhabitant. During the thirty-five years the average number of cattle depastured diminished from 3·2 to 2·9 per head. The breeding of horses and swine has about kept pace with the population.

Sheep.

The suitability for pastoral pursuits of the land discovered in the early days was undoubtedly the means of inducing the infant colony of New South Wales to take its first step on the path of commercial progress, and, looking backward, it is not a little surprising to find how steadily some of the settlers, in the face of the almost insurmountable difficulty of transport which existed a century ago, availed themselves of the opportunities at their disposal. The importation of valuable specimens of sheep from England or the Cape of Good Hope prior to the introduction of steam was at all times attended with great risk, and it frequently happened that many of these costly animals died during the tedious voyage. These enterprises were, however, on the whole successful, and thus the flocks and herds of the colonists surely, if at first slowly, increased and multiplied.

By the year 1795, Captain Macarthur, one of the first promoters of sheep-breeding in New South Wales, had accumulated a flock of 1,000, which were held in great estimation, and gradually increased in value

until, as recorded by an entry in his journal ten years later, the market price of a fat wether had risen to £5. Not satisfied with the natural increase of his flocks, Macarthur sought to improve the quality of his fleeces, by which means he could see opening before him the promise of great wealth and the prospect of establishing important commercial relations with Great Britain. With these ends in view, he procured from the Cape of Good Hope, at great cost and trouble, a number of superior rams and ewes. A happy circumstance favoured his enterprise; for he had the good fortune to secure possession of three rams and five ewes of very fine Spanish breed, which had been presented by the King of Spain to the Dutch Government. These animals, out of a total of twenty-nine purchased at the Cape, arrived in Sydney in 1797, and were disposed of to various breeders. With the exception of Macarthur, however, those who had secured sheep of the superior breed made no attempt to follow up this advantage, being probably amply satisfied with the larger gains from the sale of an increased number of animals. Macarthur, on the other hand, thought little of present profits, and still less of breeding entirely for human consumption. He attentively watched the results of crossing his imported rams with the old stock, and by systematically selecting the finer ewes which were the offspring for further mingling with the sires, he gradually improved the strain, and in a few years obtained fleeces of very fine texture which met with the ready appreciation of English manufacturers. It has been asserted that Macarthur was not the first to introduce merino sheep into Australia; but whether this be so or not, there is no doubt that to him is due the credit of having been the first to prove that the production of fine wool could be made a profitable industry in New South Wales.

Prior to the present century the production of the finest wool had been confined chiefly to Spain, and woollen manufactures were necessarily carried on in England upon a somewhat limited scale, which was not likely to improve in face of certain restrictions which the operatives endeavoured to place upon their employers. These men, in support of their contention that the woollen trade could not be expanded on account of the limited supply of raw material, argued that fine wool was obtainable only in Spain; and it was at this favourable period that Macarthur arrived in England with specimens of the wool obtained from his finest sheep, conclusively proving the capabilities of Australia as a wool-producing country. In this way he opened up with English manufacturers a small trade which, as Australasian wool rose in public estimation, gradually increased until it reached its present enormous dimensions. During his visit to England, Macarthur purchased an additional stock of ten rams and ewes of the noted Spanish breed, nearly equal in quality to those which in 1797 he had procured from the Cape of Good Hope. That these animals were the finest obtainable in Europe may be gathered from the fact they also had formed portion of a present from the King of Spain to George III. After his return to New South Wales, Macarthur patiently continued for many years the process of selection, with such

success that in 1858, when his flock was finally dispersed, it was estimated that his superior ewes numbered fully 1,000. Victoria secured a considerable portion of his flock, and the process of breeding proceeded simultaneously in that and other adjacent colonies.

Although the increase in the numbers of the finer sheep was satisfactory, yet the importation of superior stock was not discontinued, and the stock of the colonies was augmented in 1823 and 1825 by the further introduction of Spanish sheep. Sheep-breeding was about this period commenced in the Mudgee district of New South Wales; the climate of that region had a more favourable effect upon the quality of the fleeces than that of any other part of the colony, and it was thence that the finest merinos were for a long time procured. As was to be expected, the climate has in some respects changed the character of the Spanish fleece. The wool has become softer and more elastic, and while it has diminished in density it has increased in length, so that the weight of the fleece has only slightly altered. Thus, on the whole, the quality of the wool has improved under the beneficial influence of the climate, and if no further enhancement of its intrinsic value can be reasonably hoped for, there is at least every reason to believe that Australasian wool will maintain its present high standard of excellence.

The following table shows the number of sheep in each colony at the close of the years 1861 and 1896; also the annual increase per cent. in comparison with that of the population. In Victoria no live stock returns were collected in 1895 and 1896, and the figures for that colony therefore refer to the year 1894:—

Colony.	Number of Sheep.		Annual Increase per cent. from 1861 to 1896.	
	1861.	1896.	Sheep.	Population.
New South Wales	5,615,054	48,318,790	6·34	3·75
Victoria	6,239,258	13,180,943	2·16	2·24
Queensland	4,093,381	19,593,696	4·57	7·77
South Australia	3,038,356	6,402,593	2·15	3·03
Western Australia	279,576	2,248,976	6·14	6·41
Tasmania	1,714,498	1,650,567	*0·11	1·76
New Zealand	2,761,583	19,687,954	5·77	5·81
Australasia	23,741,706	111,083,519	4·51	3·57

* Decrease.

In Tasmania alone has the business of sheep-breeding decreased since 1861; yet the colony is singularly well adapted for sheep raising, and its stud flocks are well known and annually drawn upon to improve the breed of sheep in the other colonies. In all the other provinces there has been a material increase in the number of the flocks, although in New South Wales only has the advance been proportionately greater

than the population. There has been a very substantial increase in the number of sheep depastured in New Zealand, Western Australia, and Queensland during the period of thirty-five years, but the population has grown even more rapidly. In South Australia the area adapted to sheep is limited, and no great expansion in sheep-farming can be looked for. As regards Victoria, the important strides made by that province in agriculture and kindred pursuits afford sufficient explanation of the slow rate at which its flocks are increasing. The statement given below shows the proportion of sheep in each colony to the total flocks of Australasia. In 1861, out of every 100 sheep, New South Wales depastured 23·7, while in 1896 its proportion had increased to 43·5, or little short of half the total flocks. In the latter year New Zealand came second, with 17·7 per cent, closely followed by Queensland with 17·6 per cent. Western Australia is the only other colony where the proportion of sheep depastured to the total number in Australasia was higher in 1896 than in 1861 :—

Colony.	1861.	1896.
	per cent.	per cent.
New South Wales	23·7	43·5
Victoria	26·3	11·9
Queensland	17·2	17·6
South Australia	12·8	5·8
Western Australia	1·2	2·0
Tasmania	7·2	1·5
New Zealand	11·6	17·7
Australasia	100·0	100·0

In order to show the increase or decrease in sheep during the last ten years, the following table has been prepared, giving the numbers in the various colonies at the end of each year since 1887. It will be seen that returns were not collected in some years in Victoria, South Australia, and New Zealand, and that the figures for those provinces are therefore incomplete :—

Year.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.
1887	46,965,152	10,623,985	12,926,158	*	1,909,940	1,547,242	*
1888	46,503,469	10,818,575	13,444,005	*	2,112,392	1,430,065	15,468,860
1889	50,106,768	10,882,231	14,470,095	6,432,401	2,366,681	1,551,429	15,503,263
1890	55,986,431	12,602,843	18,007,234	7,050,544	2,524,913	1,619,256	18,128,186
1891	61,831,416	12,928,143	20,289,633	7,745,541	1,962,212	1,664,218	18,570,752
1892	58,080,114	12,965,306	21,708,310	7,209,500	1,685,500	1,623,338	19,380,369
1893	56,980,688	13,098,725	18,697,015	7,325,003	2,200,642	1,535,047	20,230,829
1894	56,977,270	13,180,943	19,587,691	*	2,132,311	1,727,200	19,826,604
1895	47,617,687	*	19,856,959	*	2,295,832	1,523,846	19,138,493
1896	48,318,790	*	19,593,696	6,402,593	2,248,976	1,650,567	19,687,954

* Returns not collected.

The total number of sheep slaughtered in New South Wales and Victoria during the five years ended 1896 is shown below. These are the only colonies for which it is possible to give complete slaughtering returns :—

Year.	New South Wales.	Victoria.
1892	3,456,182	2,439,026
1893	8,034,108	2,491,867
1894	8,252,878	2,125,149
1895	8,363,003	2,326,002
1896	6,196,749	2,559,088

The value of the sheep depastured in Australasia, on the basis of the average prices ruling in 1897, was £46,665,000, thus distributed among the various provinces :—

	£
New South Wales	18,724,000
Victoria	6,590,000
Queensland	6,613,000
South Australia	3,426,000
Western Australia	1,546,000
Tasmania	660,000
New Zealand	9,106,000
Australasia	£46,665,000

CATTLE.

Except in Queensland, cattle-breeding in the Australasian colonies is secondary to that of sheep. Indeed, in New South Wales in 1896 the number of the herds was even less than in 1861, the decrease amounting to 45,760, equivalent to 0·06 per cent. per annum, while during the period of thirty-five years population increased at the rate of 3·75 annually. The lowest point was reached in 1885, when the herds only numbered 1,317,315, the result partly of continuous bad seasons, but principally of the more profitable character of sheep-farming, which had induced graziers on many runs to substitute sheep for cattle. From that period there has been a gradual although small improvement, which has seemed to indicate a disposition on the part of pastoralists in some parts of the colony to devote more attention to cattle-breeding. The number of cattle in the province in 1861 was exceeded, but the droughts experienced during the last two seasons have reduced the herds to their present proportions. The progress of Victoria in the breeding

of cattle has been steady; but although the total number was nearly three times as great in 1896 as it was thirty-five years before, the position occupied by the colony in relation to the other provinces remained much the same as in 1861. Queensland has largely increased its herds, and now possesses 51·2 per cent. of the total cattle of the whole group. New Zealand and Western Australia show decided improvement, the annual rate of increase in those colonies being nearly equal to that of sheep.

The following table shows the number of cattle in 1861 and 1896, with the yearly increase per cent. during the intervening period, as well as the rate of growth of the population. The figures for Victoria refer to 1894—the last year for which returns were collected :—

Colony.	Number of Cattle.		Annual Increase per cent. 1861–1896.	
	1861.	1896.	Cattle.	Population.
New South Wales	2,271,923	2,226,163	*0·06	3·75
Victoria	628,092	1,833,900	3·11	2·24
Queensland	560,196	6,507,377	7·26	7·77
South Australia	265,434	638,591	2·54	3·03
Western Australia	33,795	199,793	5·21	6·41
Tasmania	87,114	157,730	1·71	1·76
New Zealand	193,285	1,138,572	5·20	5·81
Australasia	4,039,839	12,702,126	3·33	3·57

* Decrease.

The previous table shows the growth in the number of cattle during the period extending from 1861 to 1896. A more detailed comparison for recent years is afforded by the next table, showing the number in each colony at the close of each year since 1887. As will be seen, returns were not collected in three of the provinces—Victoria, South Australia, and New Zealand—for several years under review :—

Year.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.
1887	1,575,487	1,333,873	4,473,716	*	93,544	147,092	*
1888	1,622,907	1,370,660	4,654,932	*	95,822	142,019	853,358
1889	1,741,592	1,394,209	4,872,416	531,296	119,571	150,004	895,461
1890	2,091,229	1,782,881	5,558,264	574,032	130,970	162,440	831,831
1891	2,128,838	1,812,104	6,192,759	676,933	133,690	167,788	*
1892	2,221,459	1,824,704	6,591,416	631,522	162,886	170,085	851,801
1893	2,269,852	1,817,291	6,693,200	675,284	173,747	169,141	885,305
1894	2,465,411	1,833,900	7,012,997	*	187,214	177,038	964,034
1895	2,150,057	*	6,822,401	*	200,091	162,801	1,047,901
1896	2,226,163	*	6,507,377	638,591	199,793	157,730	1,138,572

* Returns not collected.

The number of cattle slaughtered in New South Wales and Victoria during each of the five years ended 1896 is shown in the following table. These are the only colonies for which complete information regarding the slaughter of live stock is available :—

Year.	New South Wales.	Victoria.
1892	338,598	245,919
1893	332,956	227,043
1894	346,302	229,421
1895	388,097	236,317
1896	351,246	245,477

The value of the cattle in Australasia, on the basis of the average prices ruling in 1897, was £53,646,000, thus divided amongst the various provinces :—

	£
New South Wales	10,296,000
Victoria	13,479,000
Queensland	19,197,000
South Australia	2,940,000
Western Australia	1,702,000
Tasmania	1,252,000
New Zealand	4,780,000
Australasia	£53,646,000

Horses.

Australasia is eminently fitted for the breeding of most descriptions of horses, and attention has long been directed to this industry. At an early period the stock of colonial-bred horses was enriched by the importation of some excellent thoroughbred Arabians from India, and to this cause the high name which was acquired by the horses of Australia was largely due. The abundance of good pasture everywhere obtainable also contributed to this result. The native kangaroo-grass, especially when in seed, is full of saccharine matter, and young stock thrive excellently upon it. This abundance of natural provender permitted a large increase in the stock of the settlers, which would have been of great advantage had it not been that the general cheapness of horses led to a neglect of the canons of breeding. In consequence of the discovery of gold, horses became very high priced. Under ordinary conditions this circumstance would have been favourable to breeding, and such was actually the case in Victoria. In New South Wales, however, it was far otherwise. The best of its stock, including a large proportion of the

most valuable breeding mares, was taken by Victoria, with the result that for twenty years after the gold rush the horses of the mother colony greatly deteriorated. One class of stock only escaped—the thoroughbred racer, which was probably improved both by the importation of fresh stock from England, and by the judicious selection of mares.

The colonies are specially adapted to the breeding of saddle and light-harness horses, and it is doubtful whether these particular breeds of Australasian horses are anywhere surpassed. The bush horse is hardy and swift, and capable of making very long and rapid journeys when fed only on the ordinary herbage of the country ; and in times of drought, when the grass and water have become scanty, these animals often perform astonishing feats of endurance. Generally speaking, the breed is improving, owing to the introduction of superior stud horses and the breeding from good mares. Where there has been a deterioration in the stock, it has been due to breeding from weedy mares for racing purposes and to the effects of drought.

Although the demand in India is fair, and Australia is a natural market from which supplies may be derived, the speculation of sending horses there is one open to many risks, as, apart from the dangers of the voyage, there is always an uncertainty as to the stock being accepted. Owing, therefore, to the limited foreign demand, it has not been found advantageous to breed horses except for local requirements.

The following table shows the number of horses in each colony at the end of 1861 and 1896, also the proportion to the total at each period. In 1861 New South Wales possessed 50·7 per cent. of all the horses in Australasia, Victoria being second, with 18·3 per cent. In 1896 New South Wales still held the leading position as regards numbers, but its proportion to the whole had fallen to 26·5 per cent. Queensland and New Zealand exhibit relatively the most progress, having increased their respective proportions from 6·3 and 6·2 per cent. in 1861 to 23·5 and 13·0 per cent. in 1896 :—

Colony.	Number of Horses.		Percentage of each colony to total of Australasia.	
	1861.	1896.	1861.	1896.
New South Wales	233,220	510,636	50·7	26·5
Victoria	84,057	*431,547	18·3	22·4
Queensland	28,983	452,207	6·3	23·5
South Australia	52,597	195,591	11·4	10·1
Western Australia	10,720	57,527	2·3	3·0
Tasmania	22,118	29,547	4·8	1·5
New Zealand	28,275	249,732	6·2	13·0
Australasia	459,970	1,926,787	100·0	100·0

* 1894 figures ; returns not colleeted for 1895 or 1896.

The value of horses in the various colonies is estimated as follows :—

	£
New South Wales	3,881,000
Victoria	3,539,000
Queensland	2,894,000
South Australia	1,432,000
Western Australia	460,000
Tasmania	189,000
New Zealand	2,148,000
Australasia	£14,543,000

The Flocks and Herds of the World.

The following table gives the flocks and herds of each of the great divisions of the globe. The returns are the latest available, and, with the exception of those for Australasia, are based on figures given in the report of the Statistician to the American Department of Agriculture :—

Continent.	Sheep.	Cattle.	Horses.	Swine.
Europe	187,144,000	104,430,000	36,483,000	49,164,000
Asia	39,922,000	60,847,000	4,279,000	489,000
Africa	35,589,000	6,095,000	1,239,000	547,000
America	147,535,000	115,497,000	23,203,000	50,783,000
Australasia*	111,101,000	12,843,000	1,933,000	1,043,000
Total	521,291,000	299,712,000	67,137,000	102,026,000

* Including Pacific Islands.

Stock-carrying Capacity of Australasia.

None of the colonies is stocked to its full capacity ; indeed, in the large territory of Western Australia and in the Northern Territory of South Australia the process has only begun. A clear idea of the comparative extent to which each colony is stocked cannot be given unless the different kinds of animals are reduced to a common value. Assuming, therefore, that one head of large stock is equivalent to ten sheep, and expressing cattle and horses in terms of sheep, it will be found that the number of acres to a sheep in each colony is as follows :—

Colony.	No. of acres per sheep.
New South Wales	2·6
Victoria	1·6
Queensland	4·8
South Australia	39·2
Western Australia	129·5
Tasmania	4·8
New Zealand	2·0
Australasia	7·6

The most closely-stocked colony is Victoria, with 1·6 acres per sheep, but this is by no means the limit to the carrying-capacity of that province; on the contrary, there is still a considerable tract to be brought under the sway of the pastoralist. Neither New Zealand nor New South Wales, with 2·0 and 2·6 acres per sheep respectively, can be said to have reached its full carrying-capacity. If the present average of New South Wales be taken as the possible limit to which Australasia may be stocked, then there is room in these colonies for nearly 500 million sheep or 50 million cattle more than are now depastured. That Australasia could carry 1 sheep to 2·6 acres, however, is an improbable supposition; in almost every colony the best land is under occupation, and the demands of the farmer must diminish the area at present at the disposal of the grazier. This will more especially prove true of Victoria, New Zealand, and Tasmania. On the other hand, by resisting the temptation to overstock inferior country, and by increasing the natural carrying-capacity by water conservation and irrigation and by the artificial cultivation of grasses, the colonies in which agriculture has made most progress will be able to carry stock in even larger numbers than they have hitherto attempted. Taking all circumstances into consideration, it may be fairly estimated that under the present system the colonies are capable of maintaining, in ordinary seasons, stock equivalent to 390,000,000 sheep—that is, about 133,000,000 sheep, or their equivalent in cattle, more than are now depastured.

The number of stock in Australasia, expressed in terms of sheep, the number of acres per sheep, and the number of sheep per head of population, at various dates since 1861, were as given below :—

Year.	Sheep.	Cattle, in terms of Sheep.	Horses, in terms of Sheep.	Total.	Acres per Sheep.	Sheep per head of Population.
1861	23,741,706	40,398,390	4,599,700	68,739,796	28·7	54·3
1871	49,773,584	47,138,200	7,825,580	104,737,364	18·8	53·2
1881	78,063,426	87,096,280	12,497,650	177,657,356	11·1	62·9
1891	124,547,937	118,613,300	17,858,350	261,019,587	7·5	67·4
1896	111,083,519	127,021,260	19,267,870	257,372,649	7·6	59·5

Value of Pastoral Property and Production.

The total value of pastoral property in Australasia—that is, of improvements, plant, and stock—was estimated in 1897 at £237,438,000, and of this large sum £72,006,000, or nearly one-third, belonged to New South Wales. In that amount the value of stock alone (excluding swine) comes to about £114,854,000. No account is taken of the value of land devoted to pastoral purposes, for though much purchased land

is used for depasturing stock, the larger area comprises lands leased from the State, so that a statement which omitted to take into account the value of the State lands would be misleading. The annual return from pastoral pursuits in 1896-7 was £35,150,000, the share of each colony in the total production being as follows :—

New South Wales	£13,237,000
Victoria	5,693,000
Queensland	5,943,000
South Australia	2,061,000
Western Australia	679,000
Tasmania	603,000
New Zealand	6,934,000
Australasia	£35,150,000

The products of dairy cattle and swine are not included in the foregoing statement, the figures being given in another place. It should be understood that the values quoted are those at the place of production. The value of the return from each class of stock may be approximately reckoned as follows :—

Sheep	£26,130,000
Cattle	6,402,000
Horses	2,618,000
Total	£35,150,000

As might be supposed, the greater part of the value of stock returns is due to wool. Thus, out of the £35,150,000 quoted above, £19,664,000 is the value of wool, viz.:—£19,363,600 for wool exported, and £300,400 for wool used locally. The wool export of the Australasian colonies during 1896 was 677,367,027 lb., weighed in the grease, and the quantity used locally 10,015,546 lb., making the total clip 687,382,573 lb. The value of the exports, according to the Customs returns, was £20,627,000—that is to say, £1,263,400 more than the figures shown above. The excess represents the cost of freight, handling, and brokerage between the sheep-walks and the port of shipment.

The quantity and value of the wool clip in the grease is given for each colony in the subjoined table for the years 1881 and 1896. The value of the clip of the latter year in Victoria, South Australia, Western Australia, and Tasmania does not compare favourably with that of 1881 ; but all the colonies show an improvement in the quantity of the clip, this increase being relatively greatest in Queensland, Western Australia, New Zealand, and New South Wales. New South Wales maintains its high position as a wool producer ; and it cannot be denied

that in New Zealand sheep-breeding is a flourishing concern, the flocks having increased by more than one-fourth during the last ten years in spite of the heavy demands upon the resources of the province for the supply of stock to meet the requirements of the London market in frozen mutton :—

Colony.	Weight of clip in grease.		Values.	
	1881.	1896.	1881.	1896.
	lb	lb	£	£
New South Wales	157,881,700	303,061,122	7,187,700	8,817,877
Victoria	58,832,500	71,455,561	2,562,800	2,180,763
Queensland	32,532,500	100,732,118	1,331,900	2,709,056
South Australia	46,328,200	48,061,550	1,573,300	1,097,807
Western Australia	4,107,000	11,461,346	256,700	240,756
Tasmania	8,269,700	9,182,083	498,400	288,051
New Zealand	70,787,000	143,428,793	2,910,600	4,329,748
Australasia	378,738,600	687,382,573	16,321,400	19,664,058

According to returns prepared in London, the number of bales of Australasian wool imported into Europe and America during the year 1896 was 1,846,000, which were valued at £12 per bale, giving a total of £22,152,000. The average price per bale in Sydney during the season 1896–7 was £10 5s. In comparing these prices, it must be remembered that not only have freight and charges to be added to the Australian value, but some allowance must be made for the difference in the quality and condition of the wool dealt with in the Australian markets and in London. Large quantities of the inferior portions of the clip intended for sale in the London market are scoured prior to shipment, and the London price is therefore raised to an average considerably higher than the Sydney or Melbourne price with freight and charges added. Similar returns for the year 1897 show the imports into Europe and America as 1,834,000 bales, valued at £21,091,000—a decrease of 10s. per bale on the 1896 prices, a fall which, although apparently not large, is still heavy enough, considering the low range of prices and the diminished production consequent upon a destructive drought.

The price per lb. obtained for wool in grease in London at the end of each year from 1890 was as follows :—

Year.	New South Wales. (Average Merino).	Victoria. (Good Average Merino.)	New Zealand. (Average Cross-bred.)
	d.	d.	d.
1890	8½	10	10
1891	7½	9	9½
1892	7	8½	9½
1893	7	8½	9½
1894	6	7¾	8½
1895	7½	9½	9½
1896	7	9	8½
1897	7¼	9	8

Taking the nine years beginning with 1889, the highest prices realised were obtained during the first year, namely, 11d. for New South Wales, 13d. for Victoria, and 11½d. for New Zealand ; while the lowest prices—6d. for New South Wales, 7½d. for Victoria, and 8d. for New Zealand—were experienced in 1895. The average prices realised during the whole period were 8½d. per lb. for New South Wales average merino, 10¼d. for good average Victorian merino, and 9¾d. for average New Zealand cross-bred. From these figures it will be evident that Victorian wool averages about 1¾d. per lb. higher than New South Wales wool. The figures must be taken with qualification. Much of the New South Wales wool, the product of the Riverina districts, is exported *via* Melbourne and sold as Port Phillip wool, and brings a price considerably in excess of the average given in the table for the colony of which it is the produce. The quantity of wool sold at the local sales in the Australasian colonies is increasing. Particulars of these sales will be found in the chapter on "Commerce."

The Frozen-Meat Trade.

In view of the large increase in the live stock of Australasia, the question of the disposal of the surplus cast has become a matter of serious consequence. In New South Wales especially, and in the Riverina district in particular, it was found necessary to have recourse to the old method of boiling down, which a fortunate rise in the price of tallow made it possible to carry on with a margin of profit ; but with such prices as have ruled for tallow during the past few years it cannot be said that boiling-down offers any inducement to the pastoralist, although in 1896 the production of tallow in the colony reached the large quantity of 570,983 cwt. In New Zealand a much better solution of the question of disposal of the surplus cast was found, and a trade in

frozen mutton with the United Kingdom has been established on a thoroughly payable basis—an example which some of the other colonies are endeavouring to follow, although considerably handicapped by the want of cross-bred sheep and the prejudice of the English consumer against merino mutton.

The first successful attempt at shipping frozen mutton to England was made in New Zealand in 1882, and since then the trade has attained great proportions, to the immediate benefit of the Colonial producer as well as the English consumer. The trade initiated by the New Zealand Land Company has been extended by the formation of numerous joint stock companies, which now own twenty-one meat-freezing works in the two islands, having an aggregate capacity for freezing about 4,000,000 sheep per year. The sheep are generally killed up country, and transported by rail to the freezing works. Several fleets of steamers are engaged in the trade, and the freight rates charged enable the companies to realise satisfactory profits. The growth of the frozen and preserved meat industries of New Zealand since 1881 is shown in the following table. The shipments are almost exclusively made to the United Kingdom :—

Year.	Frozen or Chilled Meat.						Preserved Meat.	
	Beef.	Mutton.	Lamb.	Mutton and Lamb.	Total Weight.	Total Value.	Weight.	Value.
	cwt.	carcases.	carcases.	cwt.	cwt.	£	lb.	£
1881	....	.....	.....	.....	.....	.....	1,074,640	22,391
1882	....	.....	.....	.....	15,244	19,339	2,913,904	54,397
1883	937	.....	.....	86,995	87,932	118,261	3,868,480	72,778
1884	1,644	.....	.....	252,422	254,066	345,081	3,103,744	59,224
1885	9,170	.....	.....	286,961	296,131	373,326	4,047,904	81,401
1886	9,391	.....	.....	336,405	345,796	426,556	2,592,464	47,426
1887	6,630	656,823	110,816	421,405	428,035	454,942	4,706,016	79,246
1888	44,613	885,843	94,681	507,306	551,919	629,110	4,912,544	86,128
1889	68,298	990,486	118,794	588,524	656,822	783,374	5,325,152	106,772
1890	98,234	1,330,176	279,741	798,625	896,859	1,084,992	6,702,752	136,182
1891	103,007	1,447,583	338,344	889,012	992,019	1,185,122	5,447,904	111,133
1892	55,020	1,316,758	290,996	806,304	861,324	1,021,838	3,939,712	69,420
1893	11,059	1,355,247	475,365	888,455	899,514	1,078,427	2,656,416	46,601
1894	912	1,633,213	459,948	1,001,342	1,002,254	1,162,770	3,368,736	57,325
1895	12,090	1,632,590	735,254	1,078,640	1,090,730	1,214,778	4,124,400	66,137
1896	25,905	1,505,969	792,037	1,065,292	1,091,197	1,239,969	5,006,848	75,661
1897	50,044	1,653,170	1,038,316	1,291,582	1,341,626	1,512,286	5,046,216	78,235

Amongst the continental colonies the export of meat has reached the largest dimensions in Queensland, although of course it consists chiefly of beef, the trade in mutton only forming one-eighteenth of

the whole. So far as they can be given, the figures showing the growth of the Queensland frozen-meat trade, as well as the exports of preserved meat, will be found below :—

Year.	Frozen or Chilled Meat.				Preserved Meat.	
	Beef.	Mutton.	Total Weight.	Total Value.	Weight.	Value.
	cwt.	cwt.	cwt.	£	lb.	£
1881	.....	.....	.....	.....	2,276,409	39,956
1882	.....	.....	.....	.....	5,689,189	119,343
1883	.....	.....	1,951	2,151	6,729,721	151,001
1884	.....	.....	8,082	11,240	2,298,696	57,101
1885	.....	.....	3,926	5,003	8,306,432	171,432
1886	.....	.....	9,289	12,103	130,658	1,586
1887	.....	.....	.....	.....	5,272,170	99,653
1888	.....	.....	.....	.....	3,964,419	77,887
1889	8,745	15,542	24,287	62,240	853,621	16,743
1890	30,253	23,799	54,052	75,908	2,769,881	44,040
1891	52,609	53,698	106,307	161,345	3,333,317	59,032
1892	123,196	51,595	174,791	276,113	6,035,035	96,828
1893	204,349	21,898	226,247	377,039	8,001,788	143,146
1894	301,837	32,187	334,024	498,652	15,544,826	250,646
1895	461,733	28,221	489,954	580,489	25,941,400	393,492
1896	434,683	31,874	466,557	501,498	21,583,658	330,728
1897	529,162	31,162	560,324	659,260	15,699,098	241,189

Next to New Zealand, the largest exporter of frozen mutton is New South Wales. During the last few years greater efforts have been made in this colony to expand the trade, and the exports show a considerable increase, although a temporary check was experienced in 1897 in consequence of the unfavourable season. But New South Wales has laboured under the disadvantage of possessing no cross-bred sheep for export, and the food qualities of the merino are scarcely appreciated in the English market, where New Zealand mutton is favourably known, and brings on an average $1\frac{1}{4}$d. per lb. more than Australian. Large tracts of the mother colony, however, are suited to the breeding of large-carcase sheep, and the pastoralists have become alive to the importance of securing a share of the meat trade of the United Kingdom. Attention

is being directed to the introduction of British rams into the colony, and a large increase in the cross-bred flocks has already taken place. Up to the present, however, the cross-bred carcases sent by New South Wales to England have not been kept apart from the merino, and have therefore failed to return the higher prices which might be expected. The attention of the freezing companies has been directed to this point, but so far without effect. The following table shows the growth of the frozen-meat trade of New South Wales; the exports of preserved meat consist almost wholly of tinned mutton :—

Year.	Frozen or Chilled Meat.				Preserved Meat.	
	Beef.	Mutton.	Total Weight.	Total Value.	Weight.	Value.
	quarters.	carcases.	cwt.	£	lb.	£
1881	.....	.....	9,980	8,554	.....	*176,721
1882	.....	.....	13,782	22,910	.....	*143,601
1883	.....	.....	34,911	43,100	.....	*221,912
1884	.....	.....	13,309	12,321	.....	*161,477
1885	.....	.....	6,271	6,064	.....	*166,561
1886	.....	.....	4,852	4,671	.....	*77,756
1887	.....	.....	21,831	19,310	9,761,154	150,714
1888	.....	.....	52,262	44,537	4,528,269	69,481
1889	.....	.....	37,868	33,426	2,877,303	52,321
1890	.. ...	.....	72,304	71,534	4,655,523	74,329
1891	.....	.....	105,013	101,828	6,581,713	87,632
1892	.....	.....	223,074	169,425	8,620,747	105,922
1893	4,773	364,958	220,584	141,640	13,092,942	164,592
1894	9,538	533,995	339,404	193,760	16,382,597	206,054
1895	88,719	1,021,006	607,818	380,107	22,384,285	302,828
1896	16,286	1,372,373	642,188	343,397	16,351,936	218,292
1897	28,529	1,065,990	503,925	275,118	10,903,611	147,165

* Including Extract of Meat.

The total capacity of the boiling-down works in New South Wales is stated at 633,900 head of cattle or 16,965,000 sheep; of chilling works, 488,500 head of cattle or 5,422,800 sheep; of freezing works, 76,500 head of cattle or 3,150,000 sheep; and of meat-preserving works, 183,000 head of cattle or 5,445,000 sheep.

The only other colony in which the meat-export trade has reached dimensions of any importance is Victoria, although its exports fall far

below those of the three colonies already dealt with. A statement of the Victorian trade from 1881 to 1897 will be found below :—

Year.	Frozen or Chilled Meat.				Preserved Meat.	
	Beef.	Mutton.	Total Weight.	Total Value.	Weight.	Value.
	cwt.	cwt.	cwt.	£	lb.	£
1881	.....	.....	.....	.....	4,026,072	102,306
1882	.....	.....	18,522	18,969	1,274,066	30,705
1883	.....	.....	9,944	12,220	3,225,657	76,015
1884	.....	.....	41,373	53,196	2,667,866	63,707
1885	.....	.....	39,107	61,617	1,486,849	38,244
1886	.....	.....	39,384	70,319	616,652	17,868
1887	.....	.....	15,245	27,270	629,054	14,291
1888	.....	.....	.....	.....	714,856	16,115
1889	.....	.....	.....	.....	805,580	16,156
1890	.....	.....	.....	.....	893,114	20,197
1891	.....	.....	.....	.....	1,052,887	19,230
1892	.....	.....	.....	.....	1,982,151	51,624
1893	.....	.....	1,307	1,838	777,953	14,349
1894	53	27,182	27,235	25,370	2,267,791	40,082
1895	268	24,563	24,831	31,673	2,917,730	43,408
1896	127	23,634	23,761	25,827	4,335,511	71,576
1897	62	21,416	21,478	20,248	5,498,315	84,914

There are at present depastured in Australasia 111,000,000 sheep and 12,702,000 cattle, of which 19,700,000 sheep and 1,138,000 cattle are in New Zealand. In this colony the industry of sheep and cattle raising has now reached such a stage that practically the whole of the stock available for market is used up every year either locally or for export, and as a consequence the numbers of both kinds of stock are stationary, and have been so for some years past. In the continental colonies a different state of things prevails. In New South Wales there is a large surplus of sheep beyond the colony's food requirements; while the cast of cattle is below the local demand, and is supplemented by the importation of stock from Queensland, the net import for the past three years being 126,049 head. The other four colonies have each a deficiency of cattle and sheep.

It is estimated that in an average year 10·25 per cent. of all the cattle depastured would be of marketable age, could they be made fit for slaughtering. Excluding New Zealand, the cattle in Australasia number 11,564,000, and at 10·25 per cent. the annual cast would be 1,185,310. The present food requirements of the colonies may be set down at 736,000 head, leaving a balance of 449,000 as the surplus available, or which might be made available, for export. At the present time, however, some of the surplus is exported either as chilled beef or preserved meat, and it is estimated that 130,000 head are annually so disposed of, leaving about 320,000 head, of age fit for market, which it is unprofitable to keep beyond their present age. These comprise the real "surplus" difficulty of the colonies, and it is a question for experts

to determine how many of the 320,000 could be fattened for export, but there seems to be abundant evidence that from 60,000 to 100,000 head of cattle could be exported in any ordinary year without trenching upon local requirements, while if the trade could be expanded without touching ruinous prices the export might be made much larger. The surplus of sheep cannot be less than 4,500,000.

Looking at the question from all points of view, it cannot be said that the frozen-meat trade is without strong elements of hope for the future. The great difficulty in the way of an expansion of the trade is the serious fall in prices; but there is no reason why better results should not be obtained if shippers are careful not to export anything of unsatisfactory quality, and so tend to enhance the value of Australian meat in the eyes of the British consumer. Signs are not wanting that the prejudice which existed against frozen mutton in the United Kingdom is fast dying out, and the adoption of the defrosting process, by which the meat may be placed on the market with a much more attractive appearance at an extra cost of $\frac{1}{4}$d. per lb., will hasten its extinction. That it is largely prejudice is made clear by the fact that of the large imports of Australian mutton into London only a small proportion seems to reach the consumer as such, the greater portion being sold as Welsh or English.

During the years 1894 and 1895 several attempts, more or less successful, were made to place live cattle and sheep in the English market. A great difficulty which was found to be in the way of establishing such a trade was the wildness of the cattle, the mortality in some of the shipments being sufficiently high to provoke strong criticism in England as to the cruelty to which the cattle were subjected by being shipped on such a long voyage. It is to be feared, however, that these expressions of opinion were prompted, not altogether by the alleged sufferings of the cattle, but to a large extent by the interests of the English producer and the American exporter. At the same time, it is clear that a permanent and profitable trade cannot be established until the cattle have been handled sufficiently to bring them into a tractable condition, for the present system of depasturing followed in Australia renders the stock too wild to endure a long stay on shipboard. Probably, however, the great strides made by the Argentine Republic in supplying the English market will make it difficult for Australian shippers to realise a satisfactory margin of profit, the near proximity of that country to Great Britain giving it an immense advantage over these colonies in the matter of freights. In view of the vast population of the United States, any increase in the export of live cattle from that country cannot be anticipated.

Dairy-farming.

Dairy-farming has of late years made fair progress in Australasia, especially in the colonies of New South Wales, Victoria, and New Zealand. The introduction of the factory system at convenient centres

and the use of the cream separator have done much to cause the extension of the industry. The number of dairy cows and the estimated quantity of milk produced by them in each colony in 1896 were as follow :—

Colony.	Dairy Cows.	Quantity of Milk produced (estimated).
	No.	gallons.
New South Wales	400,183	108,050,000
Victoria	457,924	137,000,000
Queensland	125,000*	30,500,000
South Australia	84,265	23,000,000
Western Australia	16,814	3,699,000
Tasmania	43,343	13,003,000
New Zealand	300,219	96,070,000
Australasia	1,427,748	411,322,000

* Estimated.

The estimated value of the milk and its products, butter and cheese, and of the return obtained from swine, together with the total value of dairy produce for each colony in 1896, will be found below :—

Colony.	Value of Milk, Butter, and Cheese.	Value of Return from Swine.	Total Value of Dairy and Swine Produce.
	£	£	£
New South Wales	1,852,700	381,200	2,233,900
Victoria	2,162,000	473,500	2,635,500
Queensland	569,500	125,300	694,800
South Australia	428,200	91,700	519,900
Western Australia	93,700	36,400	130,100
Tasmania	220,000	77,600	297,600
New Zealand	1,474,300	245,300	1,719,600
Australasia	6,800,400	1,431,000	8,231,400

The production of butter and cheese in each colony during 1896 is estimated to have been as follows :—

Colony.	Butter.	Cheese.
	lb.	lb
New South Wales	25,874,000	4,020,000
Victoria	37,128,000	4,743,000
Queensland	6,164,000	1,921,000
South Australia	4,617,000	907,000
Western Australia	244,000	4,000
Tasmania	2,351,000	567,000
New Zealand	21,837,000	10,812,000
Australasia	98,215,000	22,974,000

The colonies having a surplus of butter and cheese available for exportation during 1896 are shown in the following table :—

Colony.	Butter.	Cheese.
	lb.	lb.
New South Wales	592,962	.....
Victoria	22,164,418	367,193
South Australia	337,745	.....
New Zealand	7,919,312	7,986,048
Total	31,014,437	8,353,241

New South Wales was formerly both an importer and an exporter of butter, for only during the spring and early summer months was the production larger than the local requirements, while during the remainder of the year butter had to be imported to meet the local demand. Now the colony has become an exporter of butter to the United Kingdom on a fair scale ; but a large quantity of New Zealand butter is still sent to the New South Wales markets on account of the more satisfactory price realised there. There is also an importation from South Australia and Victoria for the supply of the districts adjacent to those colonies. During 1895, owing to diminished production, due to scarcity of food for the cattle on account of the drought, the imports of New South Wales exceeded the exports by 51,611 lb. ; but in 1896 the exports again exceeded the imports by 592,962 lb., and in 1897 by 3,771,474 lb.

The colonies which, on the other hand, were obliged to import butter and cheese during 1896 are shown below :—

Colony.	Butter.	Cheese.
	lb.	lb.
New South Wales	.....	949,706
Queensland	989,738	68,770
South Australia	.....	25,230
Western Australia	3,190,509	885,795
Tasmania	101,066	21,140
Total	4,281,313	1,950,641

From the foregoing figures it will be seen that those colonies which produce a surplus of butter and cheese have, after providing for the deficiency of the other provinces, a balance available for exportation to outside countries, this balance in 1896 amounting to 26,733,124 lb. of butter and 6,402,600 lb. of cheese. An export trade in butter and cheese has long been maintained by New Zealand, while in recent years

Victorian, New South Wales, and South Australian butters have been sent to the London market, and their very favourable reception there has given a fresh stimulus to the dairying industry in those colonies. The rapidity with which this trade is growing may be gauged from the following table, which shows the quantity of butter exported to the United Kingdom during the nine years ended 1897 :—

Year.	Exporting Colony.			
	New South Wales.	Victoria.	South Australia.	New Zealand.
	lb.	lb.	lb.	lb.
1889	284,251	505,478	.....	2,363,088
1890	589,160	1,286,583	10,850	2,976,848
1891	391,180	3,778,775	23,864	3,246,768
1892	1,532,782	6,446,900	.....	4,648,980
1893	2,846,989	13,141,423	357,087	5,864,656
1894	4,333,927	22,139,521	1,233,539	6,590,640
1895	1,852,360	21,127,025	1,017,629	6,181,728
1896	1,741,272	16,452,649	242,872	6,730,304
1897	5,431,109	15,450,857	16,240	8,943,088

From latest advices it would appear that the price obtained for Australian butter in London was higher than the rates ruling in the local market; and as there can hardly be a limit placed to the capacity of Australasia to produce butter and cheese, it is probable that these high prices will have the effect of greatly stimulating the dairy industry throughout all these colonies. In connection with this subject, it may be mentioned that the value of the butter, cheese, and eggs imported into the United Kingdom during 1897 was £15,916,917, £5,885,521, and £4,356,807 respectively. The supply is chiefly drawn from the Continent of Europe and from America, and of the total amounts mentioned, the only imports from Australasia were butter to the value of £1,303,515, and cheese to the value of £161,776.

It may not be out of place to remark that in one or two of the colonies the export of butter has helped to maintain prices in the local markets, and tended to restrict home consumption. If a season of great prosperity visits Australia there will be a very large increase in the local demand, with a consequent limitation in the supply available for export, so that it may be concluded that under any circumstances the prospects of the industry are encouraging.

The breeding of swine is usually carried on in conjunction with dairy-farming. Below will be found a return of the number of swine in each colony in 1861 and in 1896, together with the proportion owned by each province in comparison with the total stock. It will be observed that the actual number owned by the various colonies has in all cases increased, with the single exception of South Australia, though the relative proportions have altered considerably. New South Wales, for

instance, held over 40 per cent. of the stock of swine in 1861, whilst in 1896 its proportion had receded to 21·3 per cent.; on the other hand Victoria, which possessed only 12 per cent. in 1861, has now nearly 34 per cent. of the total number. During the intervening period, New Zealand increased its stock from nearly 12 per cent. to nearly 21 per cent. of the whole, while the proportion held by South Australia decreased from 19·1 to 6·1 per cent. :—

Colony.	Number of Swine.		Percentage of each colony to total of Australasia.	
	1861.	1896.	1861.	1896.
New South Wales	146,091	214,581	40·3	21·3
Victoria	43,480	*337,588	12·0	33·5
Queensland	7,465	97,434	2·1	9·7
South Australia	69,286	61,114	19·1	6·1
Western Australia	11,984	31,154	3·3	3·1
Tasmania	40,841	55,301	11·3	5·5
New Zealand	43,270	209,853	11·9	20·8
Australasia	362,417	1,007,025	100·0	100·0

* 1894 figures ; returns not collected for 1895 or 1896.

The products of the swine—bacon, ham, lard, and salt pork—are now exported by all the colonies with the exception of New South Wales and Western Australia, as is shown by the following table, which relates to the year 1896 :—

Colony.	Bacon and Ham.	Salt Pork.	Lard.	Net Value imported.
	£	£	£	£
New South Wales	*27,220	1,221	*884	*26,883
Victoria	49,591	639	1,175	51,405
Queensland	6,687	*13	1,803	8,477
South Australia	3,262	179	.....	3,441
Western Australia	*68,109	*913	*1,139	*70,161
Tasmania	1,476	.....	.....	1,476
New Zealand	18,332	399	192	18,923
Australasia	*15,981	1,512	1,147	*13,322

* Excess of imports.

In the case of Victoria and New Zealand small quantities of fresh and frozen pork are included with salt pork. There seems to be considerable scope for an extension of this particular branch of farming in some of the colonies.

Poultry and Minor Industries.

An estimate is given below of the value of the production of poultry and eggs, together with that arising from bee-culture, in each colony during the year 1896 :—

Colony.	Poultry and Eggs.	Honey and Beeswax.
	£	£
New South Wales	752,700	16,100
Victoria	707,100	14,700
Queensland	279,800	5,800
South Australia	215,300	4,500
Western Australia.....	71,800	1,500
Tasmania	98,100	2,000
New Zealand	423,900	8,800
Australasia	2,548,700	53,400

The most remarkable feature is the trade in eggs between South Australia as supplier and New South Wales, Victoria, and Western Australia as buyers. The returns for 1896 show that during that year South Australia exported eggs to the value of £40,353, viz., £1,461 to Victoria, £9,972 to New South Wales, and £28,920 to Western Australia. The bulk of the trade with New South Wales is transacted with the Barrier district, which is commercially a dependency of South Australia.

Pastoral and Dairy Production.

The total value of pastoral and dairy production during the year 1896, in each colony and in the whole of Australasia, together with the value per inhabitant, is shown in the following table :—

Colony.	Total Value of Pastoral and Dairy Production.	Value per Inhabitant.
	£	£ s. d.
New South Wales	16,240,000	12 12 3
Victoria	9,050,000	7 13 7
Queensland	6,923,000	14 6 11
South Australia	2,801,000	7 16 2
Western Australia.....	882,000	7 7 6
Tasmania	1,001,000	6 2 6
New Zealand	9,086,000	12 17 3
Australasia	45,983,000	10 14 10

From the following table, which gives similar information for the years 1871, 1881, and 1891, it will be seen that while the total production has increased nearly twofold since 1871 the value per inhabitant has largely decreased. In point of total value of production New South Wales, Queensland, Western Australia, and New Zealand show the most satisfactory progress ; while in Victoria, South Australia, and Tasmania the pastoral industry has advanced much more slowly :—

Colony.	1871.	1881.	1891.
	£	£	£
New South Wales	8,709,000	13,151,000	17,460,000
Victoria	7,260,000	7,499,000	9,321,000
Queensland	1,959,000	4,186,000	7,561,400
South Australia	1,800,000	3,178,000	3,148,525
Western Australia	274,000	431,000	647,350
Tasmania	734,000	1,093,000	1,117,550
New Zealand	3,210,000	7,096,000	9,153,225
Australasia—Total	23,946,000	36,634,000	48,409,050
Australasia—Per head	£ s. d. 12 7 7	£ s. d. 13 3 11	£ s. d. 12 12 0

It will be seen that the value of the production of the pastoral and dairying industry shows a fall since 1891, not only relatively to population, but absolutely to the extent of £2,426,050. Taking the principal articles of pastoral produce together, there has not been a decline in the quantities produced, although the dry season was responsible for a decline in the export of wool in 1896, and the cast of sheep was less ; indeed, the few years which have elapsed since 1891 have seen great developments in the export trade in fresh meat and butter, and the shrinkage in the total value of the trade must be set down, in an ordinary season, entirely to the fall in prices :—

Produce.	1891.	1896.
Wool, as in grease	Lb. 707,018,000	Lb. 687,383,000
Cast of sheep	No. 17,000,000	No. 15,259,000
Cast of cattle	No. 1,216,000	No. 1,302,000
Butter produced	Lb. 70,628,000	Lb. 98,215,000
Meat export	Cwt. 1,454,000	Cwt. 2,672,000

By the term "cast" is meant the number of animals of the proper age available for slaughter. The movement in prices will be seen from the following tabulation, which is based chiefly on an analysis of the New South Wales trade. The prices of 1896 are represented by 1,000:—

Year.	Price Levels of—				
	Wool.	Butter.	Cattle.	Tallow.	Hides.
1891	1,034	1,061	980	1,144	1,311
1892	1,015	1,069	964	1,167	1,119
1893	909	989	794	1,293	992
1894	842	819	610	1,201	916
1895	935	711	600	1,111	1,190
1896	1,000	1,000	1,000	1,000	1,000

EMPLOYMENT AND PRODUCTION.

TO obtain a fair approximation of the number of persons engaged in the various walks of life in Australasia was impossible before the census of 1891 was taken, for although at the Census enumerations of 1881 and previous years the occupations of the people were made a feature of the inquiry, the classification, which followed closely that originally devised by the late Dr. Farr, was unsatisfactory, as it completely failed to distinguish between producers and distributors. To avoid a repetition of this defect the Census Conference, held at Hobart in March, 1890, abandoned the English system and adopted a scheme of classification more in accordance with sound principles. Under this classification the population is divided into two great sections—breadwinners and dependents; and the breadwinners are arranged in their natural classes of producers and distributors, with their various orders and sub-orders. The classes may be shortly defined as follow :—

Section A.—Breadwinners.

Class 1. Professional.

Class 2. Domestic.

Class 3. Commercial.

Class 4. Industrial.

Class 5. Agricultural, Pastoral, Mineral, and other primary Producers.

Class 6. Indefinite.

Section B.—Dependents: Non-Breadwinners.

Class 7. Dependents.

A description of the various classes and orders, together with the number of males and females, exclusive of aborigines, belonging to each order, is given in the following pages. It is impossible, however, in a work such as this to enter minutely into details, and anyone who may desire to pursue the subject further is referred to the Census Reports of the various colonies.

Breadwinners and Dependents.

Of the total population of Australasia at the Census of 1891, the occupations of 2,023,999 males and 1,758,967 females were specified. These persons were thus divided into breadwinners and dependents:—

Sex.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.	Australasia.
Classes 1 to 6.—Number of Breadwinners.								
Males.....	382,385	387,684	146,611	102,831	21,494	48,570	205,956	1,295,531
Females ..	89,502	114,270	31,651	24,263	3,032	12,431	43,589	318,738
Persons ..	471,887	501,954	178,262	127,094	24,526	61,001	249,545	1,614,269
Classes 1 to 6.—Proportion of Breadwinners to Specified Population.								
Males.....	63·13	65·42	65·84	62·42	72·47	63·04	62·11	64·01
Females ..	17·36	21·15	18·66	15·97	15·28	18·15	14·86	18·12
Persons ..	42·09	44·31	45·44	40·13	49·54	41·91	39·93	42·67
Class 7.—Number of Dependents.								
Males.....	223,285	204,922	76,064	61,919	8,163	28,482	125,633	728,468
Females ..	425,918	426,060	137,934	127,672	16,814	56,059	249,772	1,440,229
Persons ..	649,203	630,982	213,998	189,591	24,977	84,541	375,405	2,168,697
Class 7.—Proportion of Dependents to Specified Population.								
Males.....	36·87	34·58	34·16	37·58	27·53	36·96	37·89	35·99
Females ..	82·64	78·85	81·34	84·03	84·72	81·85	85·14	81·88
Persons ..	57·91	55·69	54·56	59·87	50·46	58·09	60·07	57·33

If a comparison of the proportion of breadwinners be made with the proportion of males of supporting ages given in the table on page 43 of this volume, it will be seen that Western Australia, with the highest proportion of supporting males, viz., 67·60 per cent., naturally supplied the highest proportion of breadwinners, the leading position occupied by this colony being sufficiently accounted for by the pioneer stage of its existence; Queensland came second, with 65·22 per cent. of males of supporting ages, and 65·84 per cent. of breadwinners; Victoria third, with 62·68 per cent., and 65·42 per cent. respectively; and New South Wales fourth, with 61·41 per cent. of males of supporting ages, and 63·13 per cent. of breadwinners. Tasmania, South Australia, and New Zealand, with the lowest proportions of supporting ages, had also the lowest proportions of breadwinners; and the positions of these colonies may be largely attributed to the exodus from their shores of able-bodied men in search of employment.

In all the colonies the male breadwinners were in excess of the males of supporting ages. This fact was, of course, due to the employment of

boys under 15, and the continued activity of men over 65 years of age. The excess was greatest in Tasmania, where the largest proportion of males of the old ages was to be found. Queensland, where the excess was smallest, viz., to the extent of only 0·62 per cent., had the lowest proportion of males of the old ages, and, except Western Australia, the lowest proportion of children of dependent ages.

Dependents.

The dependents are all contained in class 7, and are thus grouped :— (1) Persons performing domestic duties ; (2) scholars and students ; (3) relatives not stated to be performing domestic duties ; (4) persons supported by the State and by voluntary contributions ; and (5) the criminal class. The first three groups are comprised in order 23, and the last two in order 24. The following table shows the number of males and females classified under each of these headings in the different colonies. It has to be stated in connection with the figures relating to female dependents, that in the Victorian and South Australian returns the persons performing domestic duties were originally classified with relatives not stated to be performing domestic duties, and the figures for these colonies have been adjusted to correspond with the returns of the other provinces :—

Sex.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.	Australasia.
Order 23, Sub-order 1.—Persons Performing Domestic Duties.								
Males	98	.....	82	.....	4	.....	393	577
Females ...	210,701	215,800	60,736	67,860	8,692	26,335	124,465	714,589
Persons....	210,799	215,800	60,818	67,860	8,696	26,335	124,858	715,166
Order 23, Sub-order 2.—Scholars and Students.								
Males	118,454	114,829	37,439	31,272	4,285	13,436	73,013	392,728
Females ...	117,136	113,217	37,067	29,910	4,310	12,885	73,778	388,303
Persons....	235,590	228,046	74,506	61,182	8,595	26,321	146,791	781,031
Order 23, Sub-order 3.—Relatives not stated to be performing Domestic Duties.								
Males	96,140	83,300	35,454	29,294	3,614	13,930	49,106	310,838
Females ...	94,123	92,481	38,768	29,084	3,639	16,170	49,933	324,198
Persons....	190,263	175,781	74,222	58,378	7,253	30,100	99,039	635,036
Total of Order 23.—All Dependents, Excluding Criminals and Persons supported by Charity.								
Males	214,692	198,129	72,975	60,566	7,903	27,366	122,512	704,143
Females ...	421,960	421,498	136,571	126,854	16,641	55,390	248,176	1,427,090
Persons....	636,652	619,627	209,546	187,420	24,544	82,756	370,688	2,131,233

Sex.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.	Australasia.
ORDER 24, SUB-ORDER 1.—SUPPORTED BY THE STATE AND BY VOLUNTARY CONTRIBUTIONS.								
Males.....	6,059	5,241	2,417	1,045	246	892	2,354	18,254
Females ...	3,450	4,180	1,292	769	162	557	1,437	11,847
Persons....	9,509	9,421	3,709	1,814	408	1,449	3,791	30,101
ORDER 24, SUB-ORDER 2.—CRIMINAL CLASS.								
Males.....	2,534	1,552	672	308	14	224	767	6,071
Females ...	508	382	71	49	11	112	159	1,292
Persons....	3,042	1,934	743	357	25	336	926	7,363
TOTAL OF ORDER 24.—DEPENDENTS ON CHARITY AND PUBLIC SUPPORT.								
Males.....	8,593	6,793	3,089	1,353	260	1,116	3,121	24,325
Females ...	3,958	4,562	1,363	818	173	669	1,596	13,139
Persons....	12,551	11,355	4,452	2,171	433	1,785	4,717	37,464
TOTAL OF CLASS 7.—ALL DEPENDENTS.								
Males.....	223,285	204,922	76,064	61,919	8,163	28,482	125,633	728,468
Females ...	425,918	426,060	137,934	127,672	16,814	56,059	249,772	1,440,229
Persons....	649,203	630,982	213,998	189,591	24,977	84,541	375,405	2,168,697

BREADWINNERS.

The breadwinners are included in classes 1 to 6, comprising orders 1 to 22. First among these classes in numerical strength stand the

PRIMARY PRODUCERS.

These are included in class 5, which embraces all persons mainly engaged in the cultivation or acquisition of food products, or in obtaining other raw materials from natural sources. Order 21 is the only one covered by this class, and is defined as containing persons directly engaged in the cultivation of land or in the rearing or breeding of animals, or in obtaining raw products from natural sources. The order is divided into six sub-orders as follow:—(1) Agricultural pursuits; (2) pastoral pursuits; (3) fisheries, the capture, preservation, or destruction of wild animals, or the acquisition of products yielded by wild animals; (4) forestry, or the acquisition of raw products yielded by natural vegetation; (5) the conservancy of water in all its forms, and water supply from natural sources; and (6) mines, quarries, or the acquisition of natural mineral products.

The conditions of production in the Australasian colonies are such that it is difficult to draw a marked line of separation between the followers of the various pursuits. A man may be set down as engaged

in agriculture, while at the same time he may be engaged in stock-raising or dairy-farming. As a matter of fact, there are few farmers who are not so engaged. A false impression of the value of agricultural or pastoral production would therefore be obtained if the total value of production hereafter given were divided by the number of hands employed and the result set down as the production per head.

The following table shows the numbers of persons belonging to each of the five sub-orders of primary producers:—

Sex.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.	Australasia.
CLASS 5, ORDER 21, SUB-ORDER 1.—PERSONS ENGAGED IN AGRICULTURAL PURSUITS.								
Males	67,576	79,245	33,891	27,961	4,378	16,131	57,090	286,272
Females	7,022	6,028	6,089	886	164	1,794	2,387	24,370
Persons	74,598	85,273	39,980	28,847	4,542	17,925	59,477	310,642
SUB-ORDER 2.—PERSONS ENGAGED IN PASTORAL PURSUITS.								
Males	31,172	10,675	13,651	4,001	1,705	720	9,786	71,710
Females	5,092	4,814	653	1,331	170	267	270	12,597
Persons	36,264	15,489	14,304	5,332	1,875	987	10,056	84,307
SUB-ORDER 3.—PERSONS ENGAGED IN FISHERIES, &c.								
Males	1,666	1,608	786	581	537	486	1,895	7,559
Females	2	7	12	1	5	25	5	57
Persons	1,668	1,615	798	582	542	511	1,900	7,616
SUB-ORDER 4.—PERSONS ENGAGED IN FORESTRY, &c.								
Males	1,653	1,511	1,102	123	299	20	2,114	6,822
Females	.....	.....	.....	.....	2	3	.....	5
Persons	1,653	1,511	1,102	123	301	23	2,114	6,827
SUB-ORDER 5.—PERSONS ENGAGED IN THE CONSERVATION AND SUPPLY OF WATER.								
Males	1,905	414	181	243	216	46	121	3,126
Females	1	2	.....	.....	1	.....	1	5
Persons	1,906	416	181	243	217	46	122	3,131
SUB-ORDER 6.—PERSONS ENGAGED IN MINES AND QUARRIES, OR IN ACQUISITION OF MINERAL PRODUCTS.								
Males	30,936	24,642	11,622	4,992	1,269	4,004	16,854	94,319
Females	1	11	5	.....	.....	.....	23	40
Persons	30,937	24,653	11,627	4,992	1,269	4,004	16,877	94,359
TOTAL OF CLASS 5.—ALL PRIMARY PRODUCERS.								
Males	134,908	118,095	61,233	37,901	8,404	21,407	87,860	469,808
Females	12,118	10,862	6,759	2,218	342	2,089	2,686	37,074
Persons	147,026	128,957	67,992	40,119	8,746	23,496	90,546	506,882

The Industrial Class.

The Industrial Class (Class 4), which stands next in numerical strength to the class of primary producers, embraces all persons not otherwise classed, who are principally engaged in various works of utility or in specialities connected with the manufacture, construction, modification, or alteration of materials so as to render them more available for the various uses of man; but excludes, as far as possible, all who are mainly or solely engaged in commercial interchange. Persons who are both primary producers and manufacturers are not included in this class, but are grouped in class 5. The industrial class is divided into seven orders—Nos. 14 to 20.

Order 14 comprises persons engaged in connection with the manufacture of, or in other processes relating to, art and mechanic productions in which materials of various kinds are employed in combination. These include books and publications; musical instruments; prints, pictures, and art materials; ornaments, minor art products, and small wares; equipment for sports and games; designs, medals, type, and dies; watches, clocks, and scientific instruments; surgical instruments and appliances; arms and explosives; machines, tools, and implements; carriages and vehicles; harness, saddlery, leather, leatherware; ships, boats, and their equipment; furniture, and chemicals and by-products.

Order 15 includes persons engaged in connection with the manufacture of, or in repairing, cleansing, or in other processes relating to textile fabrics, dress, and fibrous materials.

Order 16 is composed of persons engaged in connection with the manufacture of, or in other processes relating to food, drink, narcotics, and stimulants.

Order 17 comprises persons, not otherwise classed, engaged in manufactures or other processes connected with animal and vegetable substances. In this order are included paper manufacturers, workers in vegetable produce for fodder, and those working in wood and animal matters not elsewhere classified.

In order 18 are grouped persons engaged in the alteration, modification, or manufacture of, or in other processes relating to metals or mineral matters. It includes persons engaged in the conversion of coal and other substances to purposes of heat, light, or forms of energy, not otherwise classed; in manufactures and processes related to stone, clay, earthenware, glass, and minerals, not otherwise classed; in precious metals and precious stones; and in other metals.

It will be seen, therefore, that orders 14 to 18 comprise all those who may properly be classed as finding employment in the manufacturing industries of the colonies. The classification includes persons employed in factories as well as those who work at their own homes, the latter being especially numerous in order 15, in which there is a great pre-

ponderance of female workers. A summary of these first five orders of the industrial class is given below :—

Sex.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.	Australasia.
Class 4, Order 14.—Persons working in Art and Mechanic Productions.								
Males	18,496	20,566	4,875	4,998	937	1,789	9,284	60,945
Females	621	1,122	138	114	41	36	307	2,379
Persons	19,117	21,688	5,013	5,112	978	1,825	9,591	63,324
Order 15.—Persons working in Textile Fabrics, Dress, and Fibrous Materials.								
Males	7,709	10,941	2,546	2,312	85	1,102	8,546	33,241
Females	16,892	26,498	4,869	5,402	355	1,717	10,725	66,458
Persons	24,601	37,439	7,415	7,714	440	2,819	19,271	99,699
Order 16.—Persons working in Food, Drinks, and Stimulants.								
Males	7,683	7,188	2,155	1,916	258	720	4,421	24,341
Females	240	429	125	57	6	65	177	1,099
Persons	7,923	7,617	2,280	1,973	264	785	4,598	25,440
Order 17.—Persons working in Animal and Vegetable Substances.								
Males	9,181	5,433	2,879	892	595	1,080	3,541	23,601
Females	12	92	7	33	1	7	40	192
Persons	9,193	5,525	2,886	925	596	1,087	3,581	23,793
Order 18.—Persons working in Minerals and Metals.								
Males	13,717	15,322	4,186	3,864	520	1,314	5,872	44,795
Females	8	65	6	.....	1	2	26	108
Persons	13,725	15,387	4,192	3,864	521	1,316	5,898	44,903
Total of Orders 14 to 18.—All Persons engaged in Manufacturing Industries.								
Males	56,786	59,450	16,641	13,982	2,395	6,005	31,664	186,923
Females	17,773	28,206	5,145	5,606	404	1,827	11,275	70,236
Persons	74,559	87,656	21,786	19,588	2,799	7,832	42,939	257,159

The remaining two orders of the industrial class contain together nearly as many persons as the five orders already mentioned. Order 19 includes persons engaged in the construction or repair of buildings, roads, railways, canals, docks, earthworks, etc. ; in the disposal of silt, dead matter, or refuse ; or in operations the nature of which is undefined.

Order 20 comprises industrial workers imperfectly defined, amongst whom are included the large body of general labourers not identified with any particular industry.

The following table shows the whole of class 4, divided into manufacturing, building, and imperfectly defined trades :—

Sex.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.	Australasia.
CLASS 4, ORDERS 14 TO 18.—PERSONS ENGAGED IN MANUFACTURING INDUSTRIES.								
Males.....	56,786	59,450	16,641	13,982	2,395	6,005	31,664	186,923
Females ..	17,773	28,206	5,145	5,606	404	1,827	11,275	70,236
Persons ..	74,559	87,656	21,786	19,588	2,799	7,832	42,939	257,159
ORDER 19.—PERSONS ENGAGED IN THE CONSTRUCTION OF BUILDINGS, RAILWAYS, ROADS, &c.								
Males.....	38,507	40,656	10,772	7,018	1,783	5,308	12,704	116,748
Females ..	4	34	3	.....	.....	.....	12	53
Persons ..	38,511	40,690	10,775	7,018	1,783	5,308	12,716	116,801
ORDER 20.—PERSONS ENGAGED IN IMPERFECTLY DEFINED INDUSTRIAL PURSUITS.								
Males.....	27,357	38,911	14,602	11,074	1,801	2,714	16,577	113,036
Females ..	24	284	20	.....	3	.....	63	394
Persons ..	27,381	39,195	14,622	11,074	1,804	2,714	16,640	113,430
TOTAL OF CLASS 4.—ALL INDUSTRIAL WORKERS.								
Males.....	122,650	139,017	42,015	32,074	5,979	14,027	60,945	416,707
Females ..	17,801	28,524	5,168	5,606	407	1,827	11,350	70,683
Persons ..	140,451	167,541	47,183	37,680	6,386	15,854	72,295	487,390

THE COMMERCIAL CLASS.

The Commercial Class (class 3) embraces all persons directly connected with the hire, sale, transfer, distribution, storage, and security of property and materials, and with the transport of persons and goods, or who are engaged in effecting communication. It is divided into four sub-classes as follow:—(a) Property and finance; (b) trade; (c) storage; and (d) transport and communication.

The first of these sub-classes—property and finance—comprises order 4, described as including persons who perform offices in connection with the exchange, valuation, insurance, lease, loan or custody of money, houses, land, or property rights.

Sub-class B, trade, contains orders 5 to 11 inclusive. Order 5 comprises persons dealing in art and mechanic productions in which materials of various kinds are employed in combination. In this order are included all dealers in books, publications, and advertisements; musical instruments; prints, pictures, and art materials; ornaments,

minor art products, and small wares; equipment for sports and games; designs, medals, type, and dies; watches, clocks, and scientific instruments; surgical instruments and appliances; arms and explosives; machines, tools, and implements; carriages and vehicles; harness, saddlery, and leatherware; ships, boats, and marine stores; building materials and house fittings (not elsewhere classed); furniture, chemicals and by-products, and paper and paper-makers' materials.

Order 6 contains the persons engaged in the sale, hire, or exchange of textile fabrics and dress, and of fibrous materials.

Persons engaged in dealing in animal and vegetable food, drinks, narcotics, and stimulants are included in order 7.

Order 8 embraces all persons dealing in living animals; manures and animal waste products; leather, raw materials, and manufactures; other animal matters; seeds, plants, flowers, vegetable products for fodder and gardening purposes; and other vegetable matter not included elsewhere.

Order 9 contains persons dealing in minerals, etc., mainly used for fuel and light.

Order 10 includes persons dealing in stone, clay, earthenware, glass, and minerals not otherwise classed; gold, silver, and precious stones, and metals other than gold and silver.

Order 11 comprises general dealers (undefined), speculators on chance events, and other mercantile persons undefined.

The number of persons enumerated in each of the colonies in the seven orders belonging to sub-class B is shown in the table given below. The rather numerous class of people who are manufacturers and dealers at the same time are classed amongst manufacturers in class 4, and those who are both primary producers and dealers are grouped amongst the primary producers in class 5. Persons who are engaged both in dealing and in transportation are classed in sub-class storage of the commercial class:—

Sex.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.	Australasia.
Class 3, Order 5.—Persons Dealing in Art and Mechanic Productions.								
Males.....	3,304	3,370	632	443	90	272	1,321	9,432
Females ..	247	590	80	83	4	25	183	1,222
Persons....	3,551	3,960	712	526	94	307	1,504	10,654
Order 6.—Persons Dealing in Textile Fabrics, Dress, and Fibrous Materials.								
Males.....	4,965	5,163	1,181	1,072	71	428	2,634	15,514
Females ..	857	901	248	454	39	120	510	3,129
Persons....	5,822	6,064	1,429	1,526	110	548	3,144	18,643

Sex.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.	Australasia.
ORDER 7.—PERSONS DEALING IN FOOD, DRINK, AND STIMULANTS.								
Males.....	12,736	13,039	4,032	3,090	234	996	6,367	40,494
Females ..	1,066	1,401	338	274	11	142	534	3,766
Persons....	13,802	14,440	4,370	3,364	245	1,138	6,901	44,260
ORDER 8.—PERSONS DEALING IN ANIMALS, AND ANIMAL AND VEGETABLE MATTERS.								
Males.....	2,692	3,400	774	422	97	159	793	8,337
Females ..	59	105	9	14	.....	1	5	193
Persons....	2,751	3,505	783	436	97	160	798	8,530
ORDER 9.—PERSONS DEALING IN FUEL AND LIGHT.								
Males.....	1,339	1,648	63	447	1	156	391	4,045
Females ..	10	17	3	4	.....	1	6	41
Persons....	1,349	1,665	66	451	1	157	397	4,086
ORDER 10.—PERSONS DEALING IN MINERALS AND METALS.								
Males.....	1,503	1,684	401	364	6	142	838	4,938
Females ..	26	50	4	1	.....	14	8	103
Persons....	1,529	1,734	405	365	6	156	846	5,041
ORDER 11.—GENERAL AND UNDEFINED DEALERS AND SPECULATORS ON CHANCE EVENTS.								
Males.....	16,819	22,831	6,050	6,666	969	1,625	8,169	63,129
Females ..	1,920	3,482	907	761	164	272	1,111	8,617
Persons....	18,739	26,313	6,957	7,427	1,133	1,897	9,280	71,746
TOTAL OF CLASS 3, SUB-CLASS B.—PERSONS ENGAGED IN TRADE.								
Males.....	43,358	51,135	13,133	12,504	1,468	3,778	20,513	145,889
Females ..	4,185	6,546	1,589	1,591	218	585	2,357	17,071
Persons....	47,543	57,681	14,722	14,095	1,686	4,363	22,870	162,960

Sub-class C comprises only order 12, embracing all persons engaged in storage.

Sub-class D contains order 13, comprising persons engaged in the transport of passengers or goods, or in effecting communication. This order includes all persons engaged on railways (not in railway construction) or tramways; on roads; on seas, rivers, and canals; in the postal service; in the telegraph and telephone service; and in the delivery of documents, parcels, and messages.

The following table shows the number of persons comprised in each of the four sub-classes of the commercial class :—

Sex.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.	Australasia.
CLASS 3, SUB-CLASS A, ORDER 4.—PERSONS DEALING IN FINANCE AND REAL PROPERTY.								
Males ..	7,267	8,147	2,589	1,622	372	1,180	3,459	24,636
Females ..	652	1,141	337	221	51	514	342	3,258
Persons	7,919	9,288	2,926	1,843	423	1,694	3,801	27,894
SUB-CLASS B, ORDERS 5 TO 11.—PERSONS ENGAGED IN TRADE.								
Males	43,358	51,135	13,133	12,504	1,468	3,778	20,513	145,889
Females ..	4,185	6,546	1,589	1,591	218	585	2,357	17,071
Persons	47,543	57,681	14,722	14,095	1,686	4,363	22,870	162,960
SUB-CLASS C, ORDER 12.—PERSONS ENGAGED IN STORAGE.								
Males	313	383	247	168	33	187	300	1,631
Females ..	1	7	....	.....	.....	.....	.....	8
Persons	314	390	247	168	33	187	300	1,639
SUB-CLASS D, ORDER 13.—PERSONS ENGAGED IN RAILWAY, ROAD, AND MARINE TRAFFIC, POST AND TELEGRAPH SERVICE, ETC.								
Males	30,353	29,925	13,142	9,940	2,833	3,702	15,051	104,946
Females ..	500	1,544	253	163	52	209	144	2,865
Persons	30,853	31,469	13,395	10,103	2,885	3,911	15,195	107,811
TOTAL OF CLASS 3.—COMMERCIAL.								
Males	81,291	89,590	29,111	24,234	4,706	8,847	39,323	277,102
Females ..	5,338	9,238	2,179	1,975	321	1,308	2,843	23,202
Persons	86,629	98,828	31,290	26,209	5,027	10,155	42,166	300,304

THE INDEFINITE CLASS.

The Indefinite Class (Class 6) is the next class of breadwinners to be considered. It only comprises one order, No. 22, defined as persons whose occupations are undefined or unknown, embracing those who derive incomes from sources which cannot be directly related to any other class. The number of persons coming within this class is shown in the following table :—

Sex.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.	Australasia.
Males.....	4,788	5,006	740	893	150	232	1,747	13,556
Females ..	5,635	13,351	195	685	79	215	1,582	21,742
Persons....	10,423	18,357	935	1,578	229	447	3,329	35,298

The Domestic Class.

The Domestic Class (Class 2) embraces all persons engaged in the supply of board and lodging, and in rendering personal services for which remuneration is usually paid. It contains one order, No. 3, in the consecutive series of orders, and is divided into two sub-orders as follow :—(1) Board and lodging and (2) attendance.

As the subjoined table shows, males and females were fairly equal in number in the first of these sub-orders, while in the second the females outnumbered the males in the proportion of nearly four to one :—

Sex.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.	Australasia.
Class 2, Order 3—Sub-order 1.—Persons engaged in providing Board and Lodging.								
Males	7,777	6,857	2,596	747	194	523	3,345	22,039
Females ..	10,132	7,637	3,264	402	65	551	3,196	25,247
Persons	17,909	14,494	5,860	1,149	259	1,074	6,541	47,286
Sub-order 2.—Persons engaged in Attendance.								
Males	9,882	9,126	3,367	2,316	952	951	2,622	29,216
Females ..	28,076	34,929	11,159	10,777	1,475	5,239	16,195	107,850
Persons	37,958	44,055	14,526	13,093	2,427	6,190	18,817	137,066
Total of Class 2.—Domestic.								
Males	17,659	15,983	5,963	3,063	1,146	1,474	5,967	51,255
Females ..	38,208	42,566	14,423	11,179	1,540	5,790	19,391	133,097
Persons	55,867	58,549	20,386	14,242	2,686	7,264	25,358	184,352

As the definition of class 2 points out, it includes only those persons performing domestic duties who are usually in receipt of money wages ; the much larger number of persons performing domestic duties without receiving money wages are enumerated among the dependents, principally under the first heading—persons performing domestic duties. If these had been included in class 2, the total, instead of being 184,352, would have reached no less than 899,518.

The Professional Class.

The Professional Class (Class 1) embraces all persons engaged in the government and defence of the country who are not otherwise classed.

and those employed in satisfying the intellectual, moral, and social wants of its inhabitants. This class is divided into two orders as follow :—

Order 1, which comprises persons engaged in government (general and local), defence, law, and protection. Persons in the employment of the State are distributed, as far as possible, according to their special employment, and are, therefore, not all included in this order.

Order 2, which contains the persons ministering to religion, charity (exclusive of hospitals), health, literature, science, civil and mechanical engineering, architecture and surveying, education, fine arts, music, and amusements.

The following table gives the total number of persons in the two orders of the professional class :—

Sex.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.	Australasia.
ORDER 1.—PERSONS MINISTERING TO GOVERNMENT, DEFENCE, LAW, ETC.								
Males	7,263	6,786	3,579	1,905	601	1,026	3,085	24,245
Females	99	169	31	6	5	6	20	336
Persons	7,362	6,955	3,610	1,911	606	1,032	3,105	24,581
ORDER 2.—PERSONS MINISTERING TO RELIGION, CHARITY, HEALTH, EDUCATION, ETC.								
Males	13,826	13,207	3,970	2,761	508	1,557	7,029	42,858
Females	10,303	9,560	2,896	2,594	338	1,196	5,717	32,604
Persons	24,129	22,767	6,866	5,355	846	2,753	12,746	75,462
TOTAL OF CLASS 1.—PROFESSIONAL.								
Males	21,089	19,993	7,549	4,666	1,109	2,583	10,114	67,103
Females	10,402	9,729	2,927	2,600	343	1,202	5,737	32,940
Persons	31,491	29,722	10,476	7,266	1,452	3,785	15,851	100,043

GRADES OF WORKERS.

A distribution of the population into the characteristic divisions, such as employers, workers on their own account, relatives assisting, wage earners, and unemployed, would be extremely interesting. Unfortunately it is not possible to make such a distribution with accuracy. The distinction between employers and employed is not made in the Queensland census, and the other grades are imperfectly tabulated in all the colonies except New South Wales and Tasmania ; but from the materials to hand the summary given below has been compiled. It has to be pointed out that relatives assisting and the unemployed are included

under "other workers," and that the rather numerous class to whom the definitions of employers, working on their own account, and other workers are not properly applicable, are not included in the figures presented :—

Sex.	New South Wales.	Victoria.	South Australia.	Western Australia.	Tasmania.	New Zealand.	Australasia, exclusive of Queensland.
Employers.							
Males	53,420	39,371	15,794	2,405	5,215	24,842	141,047
Females	2,641	3,064	1,002	201	375	1,391	8,674
Persons	56,061	42,435	16,796	2,606	5,590	26,233	149,721
Engaged on their own account.							
Males	49,506	56,418	11,349	3,060	7,596	30,170	158,099
Females	14,123	14,793	2,003	270	1,509	3,405	36,103
Persons	63,629	71,211	13,352	3,330	9,105	33,575	194,202
Other Workers.							
Males	275,195	289,912	76,481	16,179	35,357	152,216	845,340
Females	65,752	83,375	21,998	2,690	9,753	40,606	224,174
Persons	340,947	373,287	98,479	18,869	45,110	192,822	1,069,514
Total Workers.							
Males	378,121	385,701	103,624	21,644	48,168	207,228	1,144,486
Females	82,516	101,232	25,003	3,161	11,637	45,402	268,951
Persons	460,637	486,933	128,627	24,805	59,805	252,630	1,413,437

As would naturally be expected, the males greatly preponderate in all the classes of bread-winners, except the domestic class, in which, owing to the great number of females engaged in attendance, there is a preponderance of females for the whole class. The only other case in which this takes place is in class 4, in the sub-order comprising persons engaged in the manufacture of dress, but the proportion which this sub-order bears to the whole class is not high enough to affect the figures relating to the class. In the sub-order of class 6 which comprises persons of independent means, females also outnumber males in New South Wales, Victoria, and Tasmania.

In the following table are given the totals of the seven classes of occupations in each colony. A distinction is made between bread-

winners and dependents, and the figures also disclose the number of persons who did not state their occupations at the census :—

Sex.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.	Australasia.
Class 1.—Professional.								
Males	21,089	19,993	7,549	4,666	1,109	2,583	10,114	67,103
Females ..	10,402	9,729	2,927	2,600	343	1,202	5,737	32,940
Persons....	31,491	29,722	10,476	7,266	1,452	3,785	15,851	100,043
Class 2.—Domestic.								
Males	17,659	15,983	5,963	3,063	1,146	1,474	5,967	51,255
Females ..	38,208	42,566	14,423	11,179	1,540	5,790	19,391	133,097
Persons....	55,867	58,549	20,386	14,242	2,686	7,264	25,358	184,352
Class 3.—Commercial.								
Males	81,291	89,590	29,111	24,234	4,706	8,847	39,323	277,102
Females ..	5,338	9,238	2,179	1,975	321	1,308	2,843	23,202
Persons....	86,629	98,828	31,290	26,209	5,027	10,155	42,166	300,304
Class 4.—Industrial.								
Males	122,650	139,017	42,015	32,074	5,979	14,027	60,945	416,707
Females ..	17,801	28,524	5,168	5,606	407	1,827	11,350	70,683
Persons....	140,451	167,541	47,183	37,680	6,386	15,854	72,295	487,390
Class 5.—Primary Producers.								
Males	134,908	118,095	61,233	37,901	8,404	21,407	87,860	469,808
Females ..	12,118	10,862	6,759	2,218	342	2,089	2,686	37,074
Persons....	147,026	128,957	67,992	40,119	8,746	23,496	90,546	506,882
Class 6.—Indefinite.								
Males	4,788	5,006	740	893	150	232	1,747	13,556
Females ..	5,635	13,351	195	685	79	215	1,582	21,742
Persons....	10,423	18,357	935	1,578	229	447	3,329	35,298
Total of Classes 1 to 6.—Breadwinners.								
Males	382,385	387,684	146,611	102,831	21,494	48,570	205,956	1,295,531
Females ..	89,502	114,270	31,651	24,263	3,032	12,431	43,589	318,738
Persons....	471,887	501,954	178,262	127,094	24,526	61,001	249,545	1,614,269
Class 7.—Dependents.								
Males	223,285	204,922	76,064	61,919	8,163	28,482	125,633	728,468
Females ..	425,918	426,060	137,934	127,672	16,814	56,059	249,772	1,440,229
Persons....	649,203	630,982	213,998	189,591	24,977	84,541	375,405	2,168,697

Sex.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.	Australasia.
				OCCUPATION NOT STATED.				
Males	2,333	5,483	1,104	2,051	150	508	1,288	12,917
Females ..	531	1,421	354	1,695	129	617	420	5,167
Persons....	2,864	6,904	1,458	3,746	279	1,125	1,708	18,084
				TOTAL POPULATION.				
Males	608,003	598,089	223,779	166,801	29,807	77,560	332,877	2,036,916
Females ..	515,951	541,751	169,939	153,630	19,975	69,107	293,781	1,764,134
Persons....	1,123,954	1,139,840	393,718	320,431	49,782	146,667	626,658	3,801,050

MANUFACTORIES.

The progress of the manufacturing industry in Australasia has been slow and fitful, even in the most advanced colonies; and although the tabular statement given below shows an increase of 37,513 hands since 1885, about one-sixth of this number has been added by a change in the tabulation of the statistics in Victoria and New South Wales. The population of the continent is not sufficient to maintain industries on anything like an extensive scale, and even the Australasian field, such as it is, has been still further limited by the intercolonial tariffs. Taking the average consumption of manufactured goods in Australasia for the past five years, it would appear that, excluding the fortuitous demand created by undue governmental expenditure, the whole of the requirements of the country could have been met by the labour of 266,000 adult males working in reasonably equipped factories with fairly adequate machinery. When, therefore, allowance is made for goods that would, under any circumstances, require to be imported, it will be seen that there is not any very large field for the extension of manufacturing operations unless in conjunction with an export trade.

The greater portion of the manufactories of Australasia may be classified as domestic industries—that is to say, industries naturally arising from the circumstances of the population, or connected with the treatment of perishable products; but there are nevertheless a fair number of industries of a more complex character which have been firmly established. A statement of the number of establishments and of the hands employed in Australasia is given below for the years 1885, 1890, and 1896. In some of the colonies the manufacturing statistics are incomplete, and it has therefore been necessary to estimate the figures in several cases:—

Year.	Establishments.	Hands employed.
1885	10,578	127,360
1890	11,157	158,780
1896	11,075	164,873

Manufactories of Victoria.

Victoria was the colony which first displayed activity in the manufacturing industries. In 1885 there were employed in factories, properly so called, 49,297 hands, and in 1889 there were 57,432 hands; but the number fell away to 39,473 in 1893. Since that year there has been an increase, shown in the following table as 10,975, but in reality not quite so great, 1,602 hands being added in 1896 in consequence of an extension in the scope of the returns. Of the 50,448 workers employed in the latter year, 3,350 may be said to have found occupation in connection with domestic industries treating of perishable produce for immediate use; 18,125 in other industries dependent upon the natural resources of the country, and 28,973 in industries the production from which comes into competition with imported goods:—

Year.	Establishments.	Hands employed.
1885	2,813	49,297
1886	2,770	45,773
1887	2,854	49,084
1888	2,975	54,488
1889	3,137	57,432
1890	3,104	56,639
1891	3,141	52,225
1892	2,952	43,192
1893	2,677	39,473
1894	2,632	41,000
1895	2,804	46,095
1896	2,810	50,448

The loss of employment from 1889 to 1893 affected 17,959 hands, viz., 16,695 males and 1,264 females. The displacement of labour occurred in all industries; but those most largely affected were as follow:—

Ironworks, etc.	4,154
Sawmills, etc.	3,798
Brickworks and potteries	2,346
Coach and waggon building	1,404
Furniture factories	1,275
Clothing manufactories	829
Printing and lithographing establishments	673
Boot factories	512
Aerated water manufactories	400
Breweries	283
Saddlery and harness manufactories	196

Compared with the other colonies, the proportion of factory hands who are women is largest in Victoria; thus, out of 57,432 hands in 1889 there were 8,327, or 14·50 per cent., females; while in 1896, of 50,448 hands, 12,669, or 25·11 per cent., were females.

Manufactories of New South Wales.

The manufacturing industries of New South Wales do not cover so wide a field as those of Victoria, although at the present time they

afford employment to almost as many persons. The equality in the number of factory hands in the two colonies is not, however, so much due to progress made by New South Wales as to the falling-off in the number of factory hands in Victoria. In New South Wales the year 1891 showed a total of 46,135 hands, viz., 41,582 males and 4,553 females; but these figures had declined in 1893 to 36,412 males and 2,506 females, or a total of 38,918. However, that was the lowest point reached in the manufacturing returns of the colony, for thenceforth there was an improvement every year until 1896, when, as will be seen from the appended statement, the hands numbered 49,840. But in that year, it must be explained, a change was made in the scope of the returns, and this accounted for an addition of 4,618 to the total number of workers. The actual increase in the course of the three years was, therefore, about 6,300 hands :—

Year.	Establishments.	Hands employed.
1885	3,419	38,794
1886	3,541	41,677
1887	3,541	43,527
1888	3,349	43,051
1889	3,106	45,564
1890	2,926	44,989
1891	2,583	46,135
1892	2,246	44,268
1893	2,093	38,918
1894	2,647	42,751
1895	2,409	43,833
1896	3,106	49,840

Of the 49,840 workers employed in 1896, it may be said that only 19,391 found employment in connection with industries the products from which come into competition with imported goods—3,902 being engaged in domestic industries treating of perishable produce required for immediate use, and 26,547 in other industries called into existence by the natural resources of the colony.

Manufactories of Other Colonies.

In Queensland systematic statistics relating to manufactories have only been taken since 1892. The figures for the last five years are as follow :—

Year.	Establishments.	Hands employed.
1892	1,329	13,369
1893	1,391	14,434
1894	1,323	15,224
1895	1,397	18,728
1896	1,332	19,733

In Tasmania statistics have been compiled since 1886, but, as might be expected, at present manufactories are on a very small scale in that colony :—

Year.	Establishments.	Hands employed.
1886	271	2,107
1887	249	2,042
1888	250	2,065
1889	232	2,179
1890	237	2,204
1891	215	2,052
1892	205	1,693
1893	204	1,427
1894	201	1,580
1895	211	1,754
1896	188	1,873

In New Zealand information regarding the manufacturing industry is obtained at the quinquennial census. In 1886 there were 1,946 establishments, employing 22,095 persons ; in 1891 the establishments numbered 2,254, and the hands 25,633 ; and in 1896 there were 2,459 establishments, employing 27,389 persons. The South Australian figures refer to the year ended March, 1897, when there were 13,090 hands employed in 812 establishments. Western Australia makes an enumeration of the number of factories, but not of the hands employed. In 1885 there were 140 establishments ; in 1890, 175 ; and in 1896, 368 establishments. An estimate which appears to be reliable gives the number of hands employed as 2,500.

Plant and Production of Manufactories.

The following figures regarding plant, etc., in New South Wales, Victoria, Queensland, Western Australia, and Tasmania, refer to the calendar year 1896; in South Australia, to the year ended March, 1897 ; while all the figures given for New Zealand are those obtained under the Census Act of 1896.

The horse-power employed in manufactories is known in the case of all the colonies except Western Australia and Tasmania, and is as follows :—

New South Wales	33,253
Victoria	28,996
Queensland	20,336
South Australia	7,394
New Zealand	28,096

The value of the plant employed is returned only for New South Wales, Victoria, Queensland, and New Zealand, and is given as follows :—

New South Wales	£5,535,905
Victoria	£4,982,640
Queensland	£3,861,747
New Zealand	£2,988,955

With regard to Tasmania, the value of land, buildings, and plant is stated to be £328,949. Assuming 40 per cent. of this amount to represent the plant alone, the value would be :—

Tasmania	£131,540

The value of the plant in the remaining two colonies has been estimated as follows :—

South Australia	£1,475,000
Western Australia	£124,500

The gross value of articles produced in manufacturing establishments is known in the case of all the colonies except South Australia and Western Australia, and is given in the appended statement. For New South Wales and Victoria the figures were obtained at the Census of 1891, and for New Zealand at the Census of 1896, while for the other two colonies they refer to the calendar year 1896 :—

New South Wales	£16,625,258
Victoria	£22,390,351
Queensland	£6,482,824
Tasmania	£523,079
New Zealand	£9,549,360

The foregoing figures include, of course, the value of materials used, of wages paid, and of fuel. In New South Wales the returns obtained under the Census and Industrial Returns Act show that the value of materials used was £7,382,070 ; of wages paid, £4,831,308 ; and of fuel, £375,927 ; making a total sum of £12,589,305 ; thus leaving the net value of production at £4,035,953. In New Zealand the value of materials used is given as £3,285,247, and of wages paid as £1,907,502, while the value of fuel may be estimated at £350,000, making a total sum of £5,542,749, so that the net value of production would amount to £4,006,611. Similar figures for the remaining colonies are not available.

Value of Production.

Full particulars regarding the value of primary production have already been given in previous chapters ; combining the results there shown with the value of manufactures, the total value of production during the year 1896–7 was £114,460,000, of which amount the total of each colony and the value per inhabitant were as follow :—

Colony.	Value of Production.	Value per Inhabitant.
	£	£ s. d.
New South Wales	33,751,000	26 4 2
Victoria	30,405,000	25 16 1
Queensland	14,387,000	30 17 0
South Australia	7,602,000	21 3 9
Western Australia	3,018,000	25 4 9
Tasmania	3,442,000	21 1 1
New Zealand	21,855,000	30 18 9
Australasia	114,460,000	26 14 9

Of this amount, £85,639,000, or £20 0s. 1d. per inhabitant, is derived from primary industries; and £28,821,000, or £6 14s. 8d. per inhabitant, from other productive industries.

The distribution of the production of the colonies under the various branches of primary and other productive industries was as follows:—

Colony.	Agriculture.	Pastoral Industries.	Dairying, Poultry-farming, &c.	Mineral Production.	Forestry and Fisheries.	Other Productive Industries.
	£	£	£	£	£	£
New South Wales....	5,322,000	13,237,000	3,003,000	4,355,000	718,000	7,116,000
Victoria	6,042,000	5,693,000	3,357,000	3,344,000	651,000	11,318,000
Queensland.....	1,603,000	5,943,000	980,000	2,629,000	372,000	2,860,000
South Australia	1,933,000	2,061,000	740,000	321,000	154,000	2,393,000
Western Australia ..	538,000	679,000	203,000	1,073,000	175,000	350,000
Tasmania	1,103,000	603,000	398,000	639,000	189,000	510,000
New Zealand	6,237,000	6,934,000	2,152,000	1,483,000	*775,000	4,274,000
Australasia.....	22,778,000	35,150,000	10,833,000	13,844,000	3,034,000	28,821,000

* Kauri gum production included hereunder.

Corresponding figures, showing approximately the total value of production at previous periods, are given in the following table:—

Colony.		1871.	1881.	1891.
		£	£	£
New South Wales		15,379,000	25,180,000	36,739,760
Victoria		19,260,000	22,750,000	30,319,610
Queensland		3,995,000	10,200,000	14,273,660
South Australia		5,228,000	8,457,000	9,025,675
Western Australia.....		707,000	943,000	1,806,340
Tasmania		2,131,000	3,586,000	3,920,940
New Zealand		9,739,000	16,490,000	21,518,915
Australasia	Total	56,439,000	87,606,000	117,604,900
	Per head	£ s. d. 28 17 0	£ s. d. 31 0 7	£ s. d. 30 3 3

Compared with the older countries of the world, the amounts stated above are by no means insignificant, and in production per head

Australasia exceeds any other country for which records are available. Although the data on which an exact statement can be founded are incomplete, there is sufficient information to warrant the assertion that from primary industries alone Australasia produces more per inhabitant than is produced from the combined industries of any other country, and a consideration of this fact will perhaps explain the ease with which these colonies bear their apparently great indebtedness, and the general prosperity they enjoyed until the disturbances incident to the banking crisis unsettled general business. The following figures, giving the value of production from primary industries in the principal countries of the world, are, with the exception of those for the Australasian colonies, taken from Mulhall's *Dictionary of Statistics* :—

Country.	Total Production.	Per head of Population.		
	£	£	s.	d.
United Kingdom	311,000,000	8	2	10
France	470,000,000	12	2	3
Germany	449,000,000	9	4	9
Russia	578,000,000	6	5	8
Austria	337,000,000	8	8	1
Italy	206,000,000	6	16	0
Spain	177,000,000	10	1	1
Portugal	32,000,000	6	16	2
Sweden	50,000,000	10	8	4
Norway	18,000,000	9	0	0
Denmark	35,000,000	16	13	4
Holland	39,000,000	8	9	7
Belgium	62,000,000	10	3	3
Switzerland	19,000,000	6	6	8
United States	883,000,000	14	2	7
Canada	59,000,000	11	7	7
Argentina	42,000,000	13	11	0
Australasia (1896–7)				
New South Wales	26,635,000	20	13	8
Victoria	19,087,000	16	4	0
Queensland	11,527,000	24	14	4
South Australia	5,209,000	14	10	4
Western Australia	2,668,000	22	6	2
Tasmania	2,932,000	17	18	9
New Zealand	17,581,000	24	17	9

Judged by the aggregate production, New South Wales stands far above the other colonies, a position which it owes to the largeness of its interests in pastoral pursuits. The value of the return from this industry was £13,237,000, a sum greater than the total production from all primary industries in every colony except Victoria and New Zealand. In value of primary production per inhabitant, New Zealand stands first, Queensland second, and Western Australia third, while Victoria is lowest, with not quite two-thirds of the production per

head of New Zealand and Queensland. Such a condition of things is only what might be anticipated from the circumstances of the colonies.

A comparison of the production of the colonies from primary industries per head of population, however, is liable to give an undue importance to those provinces which have large territories and scanty population; for it is but a natural expectation that where the population of a country is dense a large proportion of the inhabitants will be engaged in other than primary industries. If the value of primary production, therefore, be compared with the extent of territory enjoyed by each colony, it will be found that the positions of several of the provinces are reversed. Thus, Victoria occupies first position with an average primary production of £217 3s. 8d. per square mile, while Western Australia has the lowest return of £2 14s. 8d. The following, as well as the preceding table, bears testimony to the great natural resources of New Zealand, which has an average production per head of £24 17s. 9d., and per square mile of £168 5s. 9d.:—

Colony.	Total production per square mile.		
	£	s.	d.
New South Wales	85	14	6
Victoria	217	3	8
Queensland	17	4	11
South Australia	5	15	3
Western Australia	2	14	8
Tasmania	111	16	11
New Zealand	168	5	9
Australasia	27	16	7

FOOD SUPPLY AND COST OF LIVING.

CONSIDERING the comparatively high rate of wages which prevails, food of all kinds is fairly cheap in Australasia, and articles of diet which in other countries are almost within the category of luxuries are largely used even by the poorer classes. The average quantities of the principal articles of common diet annually consumed in the various colonies are given below :—

Article.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.	Australasia.
Grain—	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.
Wheat	370·1	305·2	326·0	380·0	518·8	401·8	450·0	363·0
Rice	10·3	7·4	17·1	11·4	20·0	7·5	8·6	10·1
Oatmeal	8·0	5·1	4·0	4·7	7·7	...	9·8	6·9
Potatoes	202·8	287·0	164·5	155·8	144·0	503·2	438·5	249·7
Sugar	95·9	92·9	110·5	97·9	106·3	82·9	85·3	94·5
Tea	7·8	7·2	7·8	7·7	9·5	6·4	6·4	7·4
Coffee	0·5	0·8	0·4	0·9	1·0	0·4	0·5	0·6
Cheese	3·8	3·2	3·8	2·6	6·5	...	4·5	3·8
Butter	17·7	12·1	10·7	12·9	25·3	...	18·5	15·3
Salt	40·8	19·0	51·9	8·2	15·9	17·8	32·1	30·2
Meat—								
Beef	157·0	130·0	280·0	...	144·9	145·9	90·0	150·6
Mutton	111·6	82·2	90·0	...	145·0	100·4	110·0	100·7
Pork and bacon	12·9	11·4	...	...	...	16·9	...	12·4

It will be seen that the consumption of wheat ranges from 305·2 lb. in Victoria to 518·8 lb. in Western Australia, the average consumption for Australasia being 363·0 lb. per head. The high figures for Western Australia are, of course, due to the large proportion of adult male population in that colony. In Western Australia, and also in Tasmania, there has been an increase in the average consumption, and a decrease in the other colonies. In all the colonies, also, except Western Australia, there has been a decrease in the consumption of rice ; at present the quantity used varies greatly, the consumption in Victoria being 7·4 lb. as against 20·0 lb. in Western Australia. The consumption of oatmeal is larger in New Zealand than in the other colonies. The use of tea is universal in Australia, but there has been a perceptible decline in the quantity used during the last twelve years. The consumption is

largest in Western Australia, with 9·5 lb per head, while New South Wales and Queensland come next with 7·8 lb. per head in each colony. Sugar also enters largely into consumption, the average in the two principal colonies being 95·9 lb. per head in New South Wales and 92·9 lb. in Victoria. Coffee is not a universal beverage in Australasia, the consumption being only one-twelfth that of tea. It is used most largely in Western Australia and South Australia, where the annual demand amounts to 1·0 lb. and 0·9 lb. per head respectively; but, like tea, the consumption of this beverage is not now so great as formerly.

In some of the colonies the consumption of potatoes per head of population is possibly less than is shown in the table. It is probable that the high average consumption of 503·2 lb. in Tasmania and 438·5 lb. in New Zealand is caused by the failure of the New South Wales and other continental markets to absorb the production of potatoes in excess of local requirements in those colonies, with the result that a quantity has to be given to live stock and poultry. Under these circumstances, it is impossible to determine with exactitude the quantity entering into the food consumption of the population.

The consumption of meat has been ascertained with exactness for only four colonies, but these may be taken as fairly representing the whole group. The average quantity of beef consumed in the year amounts to 150·6 lb. per head; of mutton, to 100·7 lb.; and of pork, 12·4 lb.; in all, 263·7 lb. It would thus appear that each inhabitant of these colonies requires daily nearly three-quarters of a pound of meat, and that during the year two sheep are killed for each member of the community, and one bullock to every five persons. It is obvious, therefore, that much meat must be wasted.

The quantity of meat used by the Australasian people, as shown by the above figures, is the most remarkable feature of their diet. The consumption per inhabitant in Germany is 64 lb., while in Australia it is four times that quantity. In the United States, a meat exporting country, the consumption is little more than half that of Australasia. The following table shows the meat consumption per head for the principal countries of the world :—

Country.	Per inhabitant.	Country.	Per inhabitant.
	lb.		lb
Great Britain	109	Holland	57
France	77	Sweden	62
Germany	64	Norway	78
Russia	51	Denmark	64
Austria	61	Switzerland	62
Italy	26	United States	150
Spain	71	Canada	90
Belgium	65	Australasia	264

Judged by the standard of the food consumed, the lot of the population of Australasia appears to be far more tolerable than that of the people of most other countries. This will be seen most clearly from the following table, the particulars given in which, with the exception of the figures referring to Australasia, have been taken from Mulhall's *Dictionary of Statistics*:—

Country.	Lb. per Inhabitant.						Tea and Coffee—Oz.	Daily Energy—Foot tons.
	Grain.	Meat.	Sugar.	Butter and Cheese.	Potatoes.	Salt.		
United Kingdom	378	109	75	19	380	40	91	3,552
France	540	77	20	8	570	20	66	3,914
Germany	550	64	18	8	1,020	17	78	4,629
Russia	635	51	11	5	180	19	6	3,483
Austria	460	61	18	7	560	14	28	3,495
Italy	400	26	8	4	50	18	20	2,112
Spain	480	71	6	3	20	17	6	2,567
Portugal	500	49	12	3	40	17	18	2,629
Sweden	560	62	22	11	500	28	112	3,904
Norway	440	78	13	14	500	40	144	3,489
Denmark	560	64	22	22	410	25	140	3,855
Holland	560	57	35	15	820	20	240	4,487
Belgium	590	65	27	15	1,050	...	142	4,886
Switzerland	440	62	26	11	140	...	110	2,658
Roumania	400	82	4	9	80	...	8	2,325
Servia	400	84	4	9	80	...	8	2,333
United States	370	150	53	20	170	39	162	3,218
Canada	400	90	45	22	600	40	72	3,797
Australasia	380	264	95	19	250	30	128	4,076

Taking the articles in the foregoing list, with the exception of tea and coffee, and reducing them to a common basis of comparison, it will be found

that the amount of thermo-dynamic power capable of being generated by the food consumed in Australasia is only exceeded by that eaten in Germany, Holland, and Belgium. For the purpose of comparison the figures of Dr. Edward Smith, F.R.S., in his well known work on *Foods*, have been used, and the heat developed has been reduced to the equivalent weight lifted 1 foot high. In estimating the thermo-dynamic effect of food, grain has been reduced to its equivalent in flour, and regard has been paid to the probable nature of the meat consumed. The figures for potatoes are given as they appear in the *Dictionary of Statistics;* but it is a probable supposition that but a small proportion of the quantity over 400 lb. set down for any country is required for human consumption, and the figures relating to some of the countries—notably the three just mentioned—are therefore excessive. The substances specified above are largely supplemented by other foods, both in America and in Europe, but not more so than in these colonies, and the figures in the table may be taken as affording an accurate view of the comparative quantity and food value of the articles of consumption in the countries mentioned. To make such a comparison perfectly just, however, the average amount of work which each individual in the community is called upon to perform should be taken into consideration. In Australasia the proportion of women and children engaged in laborious occupations is far smaller than in Europe and America, and the hours of labour of all persons are also less, so that the amount of food-energy required is reduced in proportion. In his *Dictionary of Statistics*, under the heading of "Diet," Mulhall gives a measure of the aggregate amount of work performed by persons doing physical and mental labour, and it would appear that when burnt in the body the food of an average man should be equal to at least 3,300 foot tons of work daily; of a woman, 2,200; and of a child, 1,100 foot tons. For Australasia the average of all persons would be about 2,125 foot tons, whereas from the table just given it would appear that the amount of work to which the daily food consumed by each individual in the colonies is equivalent is not less than 4,076 foot tons.

It must be admitted, however, that the method of comparison adopted in the table is not entirely satisfactory, as the different functions of various kinds of food have not been considered. Experiments and observations made in Europe show that a standard may be set up by which the amount of nutrients required to maintain different classes of people may be measured. Professor Voit, of Munich, whose authority is accepted by European specialists, has ascertained that to sustain a labouring man engaged in moderately hard muscular work there are required 118 grams of protein and quantities of carbo-hydrates and fats sufficient with the protein to yield 3,050 calories of energy. There are 454 grams in a pound avoirdupois, and the calorie is the amount of heat that would raise the temperature of 4 lb. of water 1° Fahrenheit. Applying the ascertained values of the various foods, the consumption of which has just been given, it will be found that the daily consumption per

inhabitant is equivalent to 105 grams of protein and 3,195 calories, or about the quantity Professor Voit declares to be sufficient for a labouring man. If allowance be made for the fact that only 40 per cent. of the population are adult males, 33 per cent. women, and 27 per cent. children, the quantity of food consumed in Australasia would appear to be far in excess of the actual requirements of the population, and though the excess may be looked upon as waste, it is none the less evidence of the wealth of the people whose circumstances permit them to indulge in it.

The following table gives the annual consumption of tobacco in Australasia and the principal countries of the world. The use of tobacco appears to be more prevalent in Western Australia and Queensland than in any of the other colonies, while the smallest consumption is in Tasmania and South Australia. Compared with other parts of the world, the average consumption of Australasia will not appear excessive :—

Country.	lb.	Country.	lb.
Australasia	2·36	Austria-Hungary	3·77
New South Wales	2·57	Italy	1·34
Victoria	2·15	Spain	1·70
Queensland	2·96	Holland	6·92
South Australia	1·92	Belgium	3·15
Western Australia	4·07	Switzerland	3·24
Tasmania	1·80	Sweden	1·87
New Zealand	2·10	Denmark	3·70
United Kingdom	1·41	Turkey	4·37
France	2·05	United States	4·40
Germany	3·00	Canada	2·11
Russia	1·23	Brazil	4·37

Taking Australasia as a whole, it compares very favourably with most European countries in the average quantity of intoxicants consumed, as the following statement shows. The figures, which are reduced to gallons of proof spirit from data given in Mulhall's *Dictionary of Statistics*, would appear even more favourable to Australasia were the fact of the large preponderance of males over females in these colonies made a feature of the comparison :—

Country.	Proof gallons.	Country.	Proof gallons.
United Kingdom	3·57	Portugal	3·00
France	5·10	Holland	4·00
Germany	3·08	Belgium	4·00
Russia	2·02	Denmark	5·00
Austria	2·80	Scandinavia	4·36
Italy	3·40	United States	2·65
Spain	2·85	Australasia	2·29

The following table shows the consumption for all the colonies during the year 1896 :—

Colony.	Spirits.		Wine.		Beer, &c.		Equivalent in Alcohol (proof) per inhabitant.
	Total.	Per inhabitant.	Total.	Per inhabitant.	Total.	Per inhabitant.	
	galls.	galls.	galls.	galls.	galls.	galls.	galls.
New South Wales.	941,715	0·73	789,067	0·61	11,773,323	9·14	2·10
Victoria	865,937	0·73	1,592,791	1·35	13,468,550	11·43	2·62
Queensland	422,859	0·91	280,422	0·60	5,763,137	12·36	2·69
South Australia ...	143,104	0·40	708,996	1·98	3,276,778	9·13	2·18
Western Australia.	263,787	2·21	164,546	1·38	2,570,755	21·50	5·37
Tasmania	61,986	0·38	14,522	0·09	1,175,798	7·19	1·34
New Zealand	447,286	0·60	99,477	0·13	5,564,808	7·46	1·60
Australasia.....	3,146,674	0·73	3,649,821	0·84	43,593,149	10·09	2·29

The largest consumption of spirits per inhabitant is in Western Australia, Queensland being second. Wine is used most freely in South Australia, Western Australia, and Victoria; and beer, in the colony of Western Australia. The average consumption of alcohol in all the colonies amounts to 2·29 gallons of proof spirit per inhabitant, ranging from 5·37 gallons in Western Australia to 1·34 gallons in Tasmania. There has been a great diminution in the quantity of alcohol consumed in Australasia during the last few years. In 1889 the average consumption was 2·82 gallons of proof alcohol; in 1890 it was 2·90 gallons; in 1891, 2·93 gallons; in 1892, 2·62 gallons; in 1893, 2·20 gallons; in 1894, 2·09 gallons; in 1895, 2·06 gallons; and in 1896, 2·29 gallons. Part of the increased consumption in 1896 must be set down to the fact that it was for the first time possible in that year to calculate the Western Australian consumption exactly; but a slight increase in consumption took place in every colony during the year, owing, no doubt, to the improved economic condition of the people.

Several descriptions of Australian wines have a natural strength of 30 per cent. of proof spirit, while from analyses which have been made it would appear that the strength of these wines offered for sale varies from 24 to 37 per cent. of spirit. Imported beers range from 13·88 per cent. to 15·42 per cent. in the case of English, and from 9·58 per cent. to 11·76 per cent. of proof spirit in Lager, while the local manufacture varied according to the make from 11·21 to 15·12, the average being 13·75 per cent. It is generally understood, however, that since the imposition of excise duties on colonial beer in New South Wales in 1887, the strength of the article has been somewhat reduced in this colony, and does not now average more than 13 per cent. of proof spirit.

Cost of Living.

Sufficient data are not available to enable a calculation to be made of the cost of living in all the colonies, but with the materials to hand an estimate can be arrived at for New South Wales. In the year 1892 an estimate was made of the yearly expenditure of the population of that colony, and it was found that it amounted to £55,445,000; but during the following years there were a shrinkage in incomes and a falling-off in the consumption of articles of luxury, and a revision of the figures in 1894 brought out a total some 16 per cent. lower, notwithstanding the increase in population. On the basis of the estimates for that year, the following would be the average expenditure per inhabitant, distributed under the principal heads, for 1896 :—

Division of Expenditure.	Per Inhabitant. £	s.	d.
Food and non-alcoholic beverages	12	12	3
Fermented and spirituous liquors	3	3	1
Tobacco	0	18	9
Clothing and drapery	5	2	0
Furniture	0	7	5
Rent or value of buildings used as dwellings	4	7	11
Locomotion	1	4	10
Fuel and light	1	8	9
Personal attendance, service, and lodging	1	2	6
Medical attendance, medicine, and nursing	1	2	3
Religion, charities, education (not including State expenditure)	0	11	9
Art and amusement	0	15	6
Books, newspapers, etc.	0	11	9
Postage and telegrams, not incidental to earning the incomes	0	3	4
Direct taxes not falling on trade or property	0	7	11
Household expenses not included elsewhere	1	10	3
Miscellaneous expenses	0	18	8
Total	£36	8	11

The expenditure for the year, viz., £36 8s. 11d. per head, was at the rate of 2s. per day. The daily expenditure may be thus distributed:—

Division of Expenditure.	Per day. d.	Proportion of Expenditure. per cent.
Food	8·3	34·6
Clothing and drapery	3·3	13·8
Rent	2·9	12·1
Direct taxes, postage, &c.	0·3	1·2
Sundries (including intoxicants)	9·2	38·3
Total	24·0	100·0

The conditions of life and the standard of living are much the same in all the colonies, but it would undoubtedly be incorrect to assume that the average expenditure throughout Australasia is equal to that of New South Wales. Making an arbitrary reduction on the New South Wales rates of 10 per cent. for the other colonies, the expenditure for Australasia would be as follows :—

Division of Expenditure.	Total Expenditure.	Per Inhabitant.
	£	£ s. d.
Food and non-alcoholic beverages	50,207,800	11 14 7
Fermented and spirituous liquors	12,562,000	2 18 8
Tobacco	3,733,000	0 17 5
Clothing and drapery	20,313,600	4 14 11
Furniture	1,475,400	0 6 11
Rent or value of buildings used as dwellings	17,503,400	4 1 9
Locomotion	4,947,200	1 3 1
Fuel and light	5,729,800	1 6 9
Personal attendance, service, and lodging	4,482,300	1 0 11
Medical attendance, medicine, and nursing	4,426,900	1 0 8
Religion, charities, education (not including State expenditure)	2,330,800	0 10 11
Art and amusement	3,086,800	0 14 5
Books, newspapers, etc.	2,344,200	0 11 0
Postage and telegrams, not incidental to earning the incomes	713,500	0 3 4
Direct taxes not falling on trade or property	1,841,500	0 8 7
Household expenses not included elsewhere	6,025,700	1 8 2
Miscellaneous expenses	3,707,600	0 17 4
Total	£145,431,500	33 19 5

According to Mulhall, the expenditure per inhabitant in the leading countries of Europe and in America is as follows :—

Country.	Expenditure per Inhabitant.	Country.	Expenditure per Inhabitant.
	£ s. d.		£ s. d.
United Kingdom	29 14 9	Norway	19 0 0
France	23 19 4	Denmark	28 11 5
Germany	20 3 4	Holland	20 17 4
Russia	10 1 11	Belgium	25 8 2
Austria	14 4 9	Switzerland	18 0 0
Italy	11 11 0	United States	32 16 2
Spain	15 12 6	Canada	23 6 2
Portugal	11 5 6		
Sweden	20 8 4	Australasia	33 19 5

The table just given affords but a partial view of the question of the cost of living, for if the total earnings of the countries above enumerated be considered as an element of comparison, it will be found that

few countries approach Australasia in the small proportion of income absorbed in providing food for the people. The following table, given on the same authority as the preceding, shows that while the actual cost of food and drink is £14 13s. 3d. in Australasia as against £14 4s. 9d. in Great Britain, the earnings required to pay for this food are not larger proportionately than in the countries which show most favourably in the table. The number of working days in the year is assumed to be 300, allowing for thirteen days' sickness and fifty-two Sundays :—

Country.	Average annual cost of food and beverage.	Ratio of cost of food to earnings.	Days' earnings equal to annua cost of food.
	£ s. d.	per cent.	days.
United Kingdom ...	14 4 9	42·2	127
France	12 4 5	44·0	142
Germany	10 18 5	49·1	148
Russia	5 19 7	52·0	156
Austria	7 17 4	50·8	152
Italy	6 4 10	51·2	153
Spain	8 9 0	51·2	154
Portugal	7 3 0	59·1	177
Sweden	9 18 11	45·2	136
Norway	9 15 0	47·6	143
Denmark	11 14 0	36·0	108
Holland	10 8 0	46·0	138
Belgium	12 3 1	43·4	130
Switzerland	8 11 7	45·2	135
United States.....	9 17 7	25·3	76
Canada.....	8 9 0	32·5	97
Australasia.....	14 13 3	34·4	103

Price Levels.

The following tables have been compiled with the object of showing to what extent the colonies have been affected by the general fall in the prices of commodities during the past thirty-eight years. The figures refer to New South Wales alone, but they may be accepted as also indicating in a fairly accurate degree the position in which the other provinces of Australasia stand in regard to this matter. The total value of the exports of each of the colonies is greatly affected by the prices obtained for certain leading lines of raw produce, of which, in the case of New South Wales, wool, silver, and coal are the most important. In the subjoined table the price-level of domestic exports of that colony is given for the thirty-eight years beginning with 1860. In order to ascertain the price-level, all the principal articles of domestic produce exported have been taken, the prices of 1897 have been applied to the quantities of each of the other years, and the result has been compared

with the actual total of such year, the level of the year being found by dividing the actual value into the value which would have been obtained had the prices of 1897 prevailed. The average for 1897 is assumed to be 1,000, the price-levels or index numbers of the other years being as shown in the table. In order to further facilitate comparison of different years, the average of the five years 1870–74 has been assumed to be 1,000, and the prices of other years have been adjusted to that basis. In compiling the price-level for exports, only articles of insignificant value have been omitted from consideration, and in no year does the value of articles included form less than 85 per cent. of the total exports, while in some years the proportion rises as high as 95 per cent., the average of all years being above 90 per cent. It is considered that this system enables a truer estimate of the relative prices to be obtained than that of selecting the prices of certain articles without giving due weight to the quantities of such articles exported :—

Year.	Price-level of Exports.		Year.	Price-level of Exports.	
	1897 prices = 1,000.	Average of 1870–74 prices = 1,000.		1897 prices = 1,000.	Average of 1870–74 prices = 1,000.
1860	2,238	1,247	1879	1,652	921
1861	2,233	1,244	1880	1,621	903
1862	2,351	1,310	1881	1,609	897
1863	2,137	1,191	1882	1,661	926
1864	2,363	1,316	1883	1,661	926
1865	2,163	1,203	1884	1,647	919
1866	2,241	1,249	1885	1,446	806
1867	2,070	1,154	1886	1,390	775
1868	2,072	1,155	1887	1,428	797
1869	1,890	1,053	1888	1,386	773
1870	1,577	879	1889	1,408	785
1871	1,929	1,075	1890	1,360	758
1872	1,757	979	1891	1,236	689
1873	1,862	1,037	1892	1,170	652
1874	1,846	1,028	1893	1,059	590
1875	1,840	1,027	1894	955	532
1876	1,743	972	1895	979	546
1877	1,598	891	1896	1,029	573
1878	1,591	887	1897	1,000	557

These figures show that there has been a great fall in the prices of colonial produce exported since 1860, or still greater since 1864, viz., from the index number 1,316 to 557, or nearly 58 per cent. Marked fluctuations, ranging to about 10 per cent., occurred between 1860 and 1866, when the index number was about the same as in the first-named year. From 1866 to 1870 there was a drop from 1,249 to 879, or about 30 per cent. A rise followed in 1871 to 1,075, or about 22 per cent., after which for four years prices continued fairly steady, until there was a further decline to 887 in 1878. In 1879 the level rose to 921

and for the next four years prices continued without much change, but from 1884 to 1885 there was a fall from 919 to 806. This was succeeded by a fairly even range until 1889, when the level stood at 785. From 1889 there was a steep decline to 532 in 1894, a fall of 32 per cent. for the five years, but in 1895 and 1896 prices recovered a little, and the level rose to 573—an advance of 7·7 per cent. In 1897 there was again a slight fall from 573 to 557, equivalent to 2·8 per cent. It will be seen that the purchasing power of money has steadily increased since 1864—if the Customs values of the exports fairly represent the prices ruling in the general community, whether in the colony or elsewhere—and that 20s. in 1897 would purchase the same articles of domestic export which in 1864 would have cost more than 47s., prices having fallen 57·7 per cent. during the period of thirty-three years. The greatest decline has taken place in the three staple exports of wool, silver, and coal. If these articles be excluded, it will be found that the fall in prices of the balance of the exports reaches 31·8 per cent.

It must not be supposed that Australia has been a loser by the fall in the prices of its exports to the extent which the price-level shows, because the power of the exports to purchase imports must also be taken into consideration. It will, therefore, be necessary to consider also the price-level of imports. As there exist no reliable data on which price-levels for imports can be based prior to 1870, the table commences with that year :—

Year.	Price-Level of Imports.		Year.	Price-Level of Imports.	
	1897 prices = 1,000.	Average of 1870–74 prices = 1,000.		1897 prices = 1,000.	Average of 1870–74 prices = 1,000.
1870	1,380	966	1884	1,232	862
1871	1,386	970	1885	1,129	790
1872	1,449	1,014	1886	1,109	776
1873	1,471	1,030	1887	1,119	783
1874	1,457	1,020	1888	1,113	779
1875	1,374	962	1889	1,160	812
1876	1,349	944	1890	1,149	804
1877	1,297	908	1891	1,096	767
1878	1,286	900	1892	1,051	736
1879	1,232	862	1893	1,012	708
1880	1,241	868	1894	961	673
1881	1,228	859	1895	951	666
1882	1,222	855	1896	990	693
1883	1,242	869	1897	1,000	700

It may be said generally that the fall in prices was somewhat in favour of the exports up to the year 1889. Since then the exports have fallen away on the average values at a much more rapid rate than the imports. A clearer view of the operation of the fall in prices will be obtained from the table which is given below, showing the price-levels

of imports of merchandise for home consumption and exports of domestic produce, for periods of five years to the end of 1894, and for the three-year period 1895–97, with the relative fall per cent. :—

Period.	Imports.		Exports.	
	Average of five years, 1870-4, prices = 1,000.	Decline in prices in five years, per cent.	Average of five years, 1870-4, prices = 1,000.	Decline in prices in five years, per cent.
1870–74	1,000	.....	1,000	.....
1875–79	915	8·5	940	6·0
1880–84	863	5·9	914	2·9
1885–89	788	8·5	787	13·8
1890–94	737	6·5	645	18·0
1895–97	686	6·9	559	13·3

It will be seen that, assuming the index number of the five years 1870–74 to be 1,000, the fall in the succeeding five years was 8·5 per cent. for the imports, as compared with 6 per cent. for the exports. The average value of the imports for the five years ending with 1884 was 5·9 per cent. less than in the preceding quinquennial period, whereas the difference in the value of the exports was 2·9 per cent. During the next five years the average value of the imports declined 8·5 per cent., while the fall in the value of the exports was no less than 13·8 per cent., so that the index number for 1885–89 for both imports and exports was practically the same figure. As already mentioned, the fall for the period 1890–94 was much more heavy in regard to the exports than the imports, amounting to 18 as compared with 6·5 per cent.; but during the period 1895–97 the fall in the exports was about twice as great as in the imports. It may, therefore, be said that the period 1895–97 was rather more favourable to the colonies than the one immediately preceding.

New South Wales, in common with the other Australasian colonies, is chiefly affected by the fall in prices because it is a debtor country. In the chapter on "Private Finance" will be found certain calculations showing that the annual charge payable by the State and municipalities on their indebtedness to British creditors is £2,099,000 while the earnings of investments made in the colony by private persons, or drawn by absentees, amount to £2,471,000 per annum. As the whole of the interest on Government and municipal loans has to be paid by exports, irrespective of the fall in prices, and as a large portion also of the interest payable to private investors is in the same category, the fall is a matter of very serious importance to these colonies, viewed as debtor States. Fortunately the increase of production, as compared with the population, has been so great in New South Wales as to counteract the fall in prices; but it is hardly possible to believe that the probable increase of production will compensate the colony for a renewed fall at the alarming rate which characterised the period from 1889 to 1894.

PUBLIC FINANCE.

THE functions of Government are much alike throughout Australasia, and it is only to be expected, therefore, that similar items of expenditure should be found in the budgets of the various colonies. The chief point of difference is the extent to which local requirements are provided for out of general revenue. In most of the provinces provision for local improvements is a matter of which the State has ere this divested itself; but in New South Wales and Western Australia the central government still charges itself with the construction of works of a purely local character, especially in the rural districts; hence the appearance, in the statements of public expenditure of those colonies, of items of large amount which find no parallel in the other provinces. Also, when comparison is made with outside countries, other points of difference are found. In these colonies, as in other young communities, it has been necessary for the State to initiate works and services which in older countries have come within the province of the local authorities or have naturally been left to be undertaken by private enterprise. Even at the present day it is deemed advisable that the Government should retain the control of services, such as the railways, which in the United Kingdom and some other countries are not generally regarded as forming part of the functions of the State, and it is on account of the administration of these services that the budgets of the Australasian colonies reach such comparatively high figures.

In the colonies of New South Wales, Victoria, Queensland, South Australia, and Western Australia, the financial year ends on the 30th June; in Tasmania, on the 31st December; and in New Zealand, on the 31st March. Below will be found a statement showing the total revenue and expenditure of each colony for the financial year 1896–7, with the amounts per head of population. It must be pointed out that from the revenue and expenditure of New South Wales, Victoria, South Australia, Tasmania, and New Zealand, as given in the table, refunds are excluded; while for Queensland and Western Australia there is

nothing in the published statements to show whether the amounts are gross or net :—

Colony.	Year ended—	Total.		Per head of population.	
		Revenue.	Expenditure.	Revenue.	Expenditure.
		£	£	£ s. d.	£ s. d.
New South Wales.....	30 June, 1897..	9,107,208	9,140,350	7 0 5	7 0 11
Victoria	30 June, 1897..	6,630,217	6,814,843	5 12 11	5 16 0
Queensland.....	30 June, 1897..	3,613,150	3,604,264	7 13 1	7 12 8
South Australia*	30 June, 1897..	2,698,759	2,779,110	7 9 10	7 14 4
Western Australia	30 June, 1897..	2,842,751	2,839,453	20 12 2	20 11 8
Tasmania.....	31 Dec., 1896..	797,976	750,244	4 17 8	4 11 10
New Zealand	31 Mar., 1897..	4,725,799	4,483,981	6 13 6	6 6 8
Australasia		30,415,860	30,412,245	7 1 0	7 0 11

* Including Northern Territory.

As will be seen from the table, the revenue of the colonies for the financial year 1896-7 was £30,415,860, or £7 1s. per head of population, and the expenditure, £30,412,245, or £7 0s. 11d. per head, showing a total surplus on the twelve months' transactions of £3,615. The colonies which had a surplus were Queensland, Western Australia, Tasmania, and New Zealand ; and those which had a deficit, New South Wales, Victoria, and South Australia. In regard to the last-mentioned colony, it may be stated that the revenue and expenditure of the colony proper were £2,628,049 and £2,635,860 respectively, and of the Northern Territory, £70,710 and £143,250. The deficit on the year's transactions was, therefore, chiefly due to the administration of the great area north of the 26th degree of south latitude.

Sources of Revenue.

The revenue of the colonies is mainly derived from taxation and public services. During the year 1896–7 the customs and excise duties yielded £8,765,594, and other forms of taxation, £2,834,743 ; while the railways and tramways returned a revenue of £10,494,612, and posts and telegraphs £2,467,936 ; making altogether a sum of £24,562,885

derived from these sources, or 80·8 per cent. of the total receipts. A division of the revenue of each colony is appended:—

Colony.	Taxation.		Railways and Tramways	Posts and Telegraphs.	Public Lands.	Other Revenue.	Total Revenue.
	Customs and Excise Duties.	Other.					
	£	£	£	£	£	£	£
New South Wales	1,523,778	865,579	3,334,316	686,895	1,898,779	797,861	9,107,208
Victoria	2,023,422	573,628	2,597,255	522,739	412,972	500,201	6,630,217
Queensland	1,265,646	234,698	1,136,861	239,335	514,439	222,171	3,613,150
South Australia	629,807	311,268	1,038,909	260,725	177,517	280,533	2,698,759
Western Australia	1,087,257	97,627	939,146	222,716	397,533	98,472	2,842,751
Tasmania	347,925	108,792	160,985	70,564	69,522	40,188	797,976
New Zealand	1,887,759	643,151	1,287,140	464,962	272,954	169,833	4,725,799
Australasia	8,765,594	2,834,743	10,494,612	2,467,936	3,743,716	2,109,259	30,415,860

Below will be found a statement of the revenue in 1896–7 on the basis of population. The average for the whole of Australasia was £7 1s. 0d. per head, the amount ranging from £4 17s. 8d. in Tasmania to £20 12s. 2d. in Western Australia. The high revenue in the latter colony is attributable to the influx of foreign capital consequent on the discovery of the gold-fields. As most of the goods entering the colony are subject to duty, a large importation of capital necessarily means a large customs revenue and increased traffic and earnings of the railways:—

Colony.	Taxation.		Railways and Tramways.	Posts and Telegraphs.	Public Lands.	Other Revenue.	Total Revenue.
	Customs and Excise Duties.	Other.					
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
New South Wales	1 3 6	0 13 4	2 11 5	0 10 7	1 9 3	0 12 4	7 0 5
Victoria	1 14 5	0 9 10	2 4 3	0 8 11	0 7 0	0 8 6	5 12 11
Queensland	2 13 8	0 9 11	2 8 2	0 10 2	1 1 9	0 9 5	7 13 1
South Australia	1 15 0	0 17 3	2 17 8	0 14 6	0 9 10	0 15 7	7 9 10
Western Australia	7 17 8	0 14 2	6 16 2	1 12 3	2 17 8	0 14 3	20 12 2
Tasmania	2 2 7	0 13 4	0 19 8	0 8 8	0 8 6	0 4 11	4 17 8
New Zealand	2 13 4	0 18 2	1 16 4	0 13 2	0 7 8	0 4 10	6 13 6
Australasia	2 0 8	0 13 2	2 8 8	0 11 5	0 17 4	0 9 9	7 1 0

It will be seen that the colony with the highest revenue from customs and excise duties as compared with population is Western Australia, New South Wales being at the other end of the scale. A false impression, however, is apt to be gathered from a bare statement of the amounts per head, as it might be assumed that the provinces with the least revenue are the most lightly taxed, while those with large revenues are heavily burdened. As a matter of fact, the truth is often the reverse of this; for a low consumption of dutiable goods under a high tariff might give no greater revenue than a high consumption under a lower tariff.

Dividing the revenue derived from taxation into that payable (*a*) directly and (*b*) indirectly by the people, the former including land and income taxes, stamp duties, etc., and the latter customs and excise, license fees, etc., the appended figures are obtained :—

Colony.	Total Taxation, 1896-7.			Per head of population.		
	Direct.	Indirect.	Total.	Direct.	Indirect.	Total.
	£	£	£	£ s. d.	£ s. d.	£ s. d.
New South Wales	748,899	1,640,458	2,389,357	0 11 7	1 5 3	1 16 10
Victoria	557,187	2,039,863	2,597,050	0 9 6	1 14 9	2 4 3
Queensland	177,380	1,322,964	1,500,344	0 7 6	2 16 1	3 3 7
South Australia	289,949	651,126	941,075	0 16 1	1 16 2	2 12 3
Western Australia	74,968	1,109,916	1,184,884	0 10 11	8 0 11	8 11 10
Tasmania	95,288	361,429	456,717	0 11 8	2 4 3	2 15 11
New Zealand	643,151	1,887,759	2,530,910	0 18 2	2 13 4	3 11 6
Australasia	2,586,822	9,013,515	11,600,337	0 12 0	2 1 10	2 13 10

Comparing these figures with the returns for the year 1881, which are given below, it will be found that the general tendency has been to increase the direct taxation of the people, on account of the diminished land sales and the shrinkage in other revenue ; while, with the exception of Western Australia, the revenue from indirect taxation per head of population has decreased, despite the general extension of the number of dutiable articles and the heavier duties levied. This, however, is only what might be expected to follow the smaller borrowings and the diminished purchasing power of the people during the past few years :—

Colony.	Total Taxation.			Per Inhabitant.		
	Direct.	Indirect.	Total.	Direct.	Indirect.	Total.
	£	£	£	£ s. d.	£ s. d.	£ s. d.
New South Wales	192,503	1,578,345	1,770,848	0 5 0	2 1 3	2 6 3
Victoria	347,782	1,635,345	1,983,127	0 8 1	1 18 0	2 6 1
Queensland	49,311	608,443	657,754	0 4 7	2 16 7	3 1 2
South Australia	14,522	569,617	584,139	0 1 1	2 2 7	2 3 8
Western Australia	1,206	114,919	116,125	0 0 10	3 17 10	3 18 8
Tasmania	66,748	283,398	350,146	0 11 5	2 8 6	2 19 11
New Zealand	405,802	1,480,507	1,886,309	0 16 6	3 0 1	3 16 7
Australasia	1,077,874	6,270,574	7,348,448	0 7 10	2 5 8	2 13 6

In respect of the proportion of revenue raised at the present time by taxation, the colonies differ considerably. Thus, no less than 57·2 per cent. of the revenue of Tasmania in 1896–7 was derived from that source ; while in New Zealand the proportion was 53·5 per cent. ; in Western Australia, 41·7 per cent. ; in Queensland, 41·5 per cent. ; in Victoria, 39·2 per cent. ; in South Australia, 34·9 per cent. ; and in New South Wales, only 26·2 per cent. The comparison, however, is only interesting as showing the large territorial revenue that New South Wales is fortunate enough to possess.

In all the colonies probate duties are levied, and in all the colonies except Western Australia and Queensland, land and income taxes. In Queensland the only incomes taxed are the dividends of joint-stock companies. In the previous edition of this work the changes in the probate and succession duties, and in the land and income taxes, were traced; the description given below deals only with the duties as they stand at the present time.

Probate and Succession Duties.

New South Wales.—In this colony a duty of 1 per cent. is payable on the value of the real and personal estate of a testator or intestate, and on settlements of property taking effect after death, provided the value of the property is less than £5,000; 2 per cent. is payable on estates of the value of £5,000 and under £12,500; 3 per cent. upon £12,500 and under £25,000; 4 per cent. upon £25,000 and under £50,000; and 5 per cent. upon £50,000 and upwards. Estates not exceeding £200 in gross value are exempt from duty.

Victoria.—The present rates of duty payable in Victoria on the estates of deceased persons are as follow:—

Exceeding—	Not exceeding—	Rate.	Exceeding—	Not exceeding—	Rate.
£	£	per cent.	£	£	per cent.
.....	1,000	Nil.	34,000	36,000	$6\frac{2}{5}$
1,000*	5,000*	2	36,000	38,000	$6\frac{3}{5}$
5,000	6,000	3	38,000	40,000	$6\frac{4}{5}$
6,000	7,000	$3\frac{1}{5}$	40,000	44,000	7
7,000	8,000	$3\frac{2}{5}$	44,000	48,000	$7\frac{1}{5}$
8,000	9,000	$3\frac{3}{5}$	48,000	52,000	$7\frac{2}{5}$
9,000	10,000	$3\frac{4}{5}$	52,000	56,000	$7\frac{3}{5}$
10,000	12,000	4	56,000	60,000	$7\frac{4}{5}$
12,000	14,000	$4\frac{1}{5}$	60,000	64,000	8
14,000	16,000	$4\frac{2}{5}$	64,000	68,000	$8\frac{1}{5}$
16,000	18,000	$4\frac{3}{5}$	68,000	72,000	$8\frac{2}{5}$
18,000	20,000	$4\frac{4}{5}$	72,000	76,000	$8\frac{3}{5}$
20,000	22,000	5	76,000	80,000	$8\frac{4}{5}$
22,000	24,000	$5\frac{1}{5}$	80,000	84,000	9
24,000	26,000	$5\frac{2}{5}$	84,000	88,000	$9\frac{1}{5}$
26,000	28,000	$5\frac{3}{5}$	88,000	92,000	$9\frac{2}{5}$
28,000	30,000	$5\frac{4}{5}$	92,000	96,000	$9\frac{3}{5}$
30,000	32,000	6	96,000	100,000	$9\frac{4}{5}$
32,000	34,000	$6\frac{1}{5}$	100,000	.....	10

* With exemption of £1,000.

Only one-half of these rates is payable on the net amount received by the widow, children, and grandchildren of the testator or intestate, provided the total value of the estate is not more than £50,000 after all debts have been paid.

Queensland.—A succession duty of 2 per cent. is levied in Queensland on property acquired by a person on the death of its former owner when the value of the property is £200 and under £1,000; 3 per cent. is chargeable upon property valued at £1,000 and under £2,500; 4 per cent. upon £2,500 and under £5,000; 6 per cent. upon £5,000 and under £10,000; 8 per cent. upon £10,000 and under £20,000; and 10 per cent. upon £20,000 and upwards. When the successor is the wife or husband or lineal issue of the predecessor, one-half of these rates only is charged; and when the successor is a stranger in blood to the predecessor double rates are charged. The following small probate duties are also payable on the net value of the property:—

Value.	Probates.	Letters of Administration.
Under £50	Nil.	Nil.
£50 and not exceeding £100	10s.	£1.
Over £100 and not exceeding £200	£1.	£2.
,, £200 ,, ,, £500	£2.	£4.
,, £500	£5.	£10.

Succession duty is chargeable on all property held within the colony, although the testator or intestate may have been domiciled elsewhere; but power is taken to compound the duty and to accept one sum in respect of all successions, present and future, in the case of the deceased having been domiciled in the United Kingdom or a British possession, and it has been found difficult to assess the value of the succession. Also, where the British Government or the Government of a British possession exempts from duty property held in Queensland by a person domiciled in the United Kingdom or the British possession referred to, no duty is chargeable by the Queensland Government on property held in the United Kingdom or such British possession by a person domiciled in the colony.

South Australia.—Succession duties are imposed on real and personal property derived from the estate of a deceased person; on settlements of property to take effect after the death of the settlor; and on property made over by deed of gift during the lifetime of the donor, and not made before and in consideration of marriage, or in favour of a *bona-fide* purchaser or encumbrancer for valuable consideration. The duty is levied on the net present value, and is fixed at 10 per cent. when the legatee or beneficiary is a stranger in blood to the person from whom the property is received. When the person taking the property is the widow, widower, descendant, or ancestor, it is subject to a duty of 1½ per cent. if the value is £500 and under £700; if £700 and under £1,000, 2 per cent.; £1,000 and under £2,000, 3 per cent.; £2,000 and under £3,000, 3½ per cent.; £3,000 and under £5,000, 4 per cent.; £5,000 and under £7,000, 4½ per cent.; £7,000 and under £10,000, 5 per cent.; £10,000 and under £15,000, 5½ per cent.; £15,000 and under £20,000, 6 per cent.; £20,000 and under £30,000, 6½ per cent.; £30,000 and under £40,000, 7 per cent.; £40,000 and under £60,000,

7½ per cent.; £60,000 and under £80,000, 8 per cent.; £80,000 and under £100,000, 8½ per cent.; £100,000 and under £150,000, 9 per cent.; £150,000 and under £200,000, 9½ per cent.; and £200,000 and upwards, 10 per cent.; one-half of these rates only to be charged when the person taking the property is the child (under 21 years of age) or the widow of the deceased, and the net present value of the whole estate is under £2,000. When the property is taken by a brother or sister, or a descendant of a brother or sister, or a person in any other degree of collateral consanguinity to the deceased person, settlor, or donor, a duty of 1 per cent. is charged if the net present value is under £200; if £200 and under £300, 1½ per cent.; £300 and under £400, 2 per cent.; £400 and under £700, 3 per cent.; £700 and under £1,000, 3½ per cent.; £1,000 and under £2,000, 4 per cent.; £2,000 and under £3,000, 5 per cent.; £3,000 and under £5,000, 6 per cent.; £5,000 and under £10,000, 7 per cent.; £10,000 and under £15,000, 8 per cent.; £15,000 and under £20,000, 9 per cent.; and £20,000 and upwards, 10 per cent.

Western Australia.—Probate duty is payable on the estates of deceased persons, and upon settlements of property to take effect after the death of the donor, with the exception of ante-nuptial settlements, all post-nuptial settlements made in pursuance of an agreement entered into before marriage, all settlements, on or for the wife, or her issue, or the issue of the settlor, of property which has accrued to the settlor after the marriage in right of his wife; and payable upon all settlements made in favour of a purchaser or encumbrancer in good faith and for valuable consideration. The duty is imposed on the net value of the estate after all debts have been paid. The lowest sum subject to taxation is £1,500, and this sum is likewise exempted when the net value of the estate is less than £2,500, but when this value is exceeded no exemption is made. The rates of duty are as follow :—

£1,500 and under	£2,500 (on excess of £1,500)	1	per cent.
£2,500 ,,	£5,000	2	,,
£5,000 ,,	£10,000	3	,,
£10,000 ,,	£20,000	4	,,
£20,000 ,,	£30,000	5	,,
£30,000 ,,	£40,000	6	,,
£40,000 ,,	£60,000	7	,,
£60,000 ,,	£80,000	8	,,
£80,000 ,,	£100,000	9	,,
Over £100,000		10	,,

with half these rates when the beneficiaries comprise the parent, issue, husband, wife, and issue of husband or wife of the deceased.

Tasmania.—In this colony duties are imposed on probates of wills and letters of administration. The duty is levied on the net value of the personal estate of the testator or intestate. When the amount is

under £100 no duty is payable; when it is £100 and not more than £500 the duty is 2 per cent.; and when it is £500 and upwards the duty is 3 per cent. Life policies are exempt from taxation.

New Zealand.—The following duties are imposed in New Zealand on the final balance of the real and personal property left by a testator or intestate; on settlements of property taking effect after the death of the settlor; and on property made over by deed of gift taking effect during the lifetime of the donor, and not being property granted before and in consideration of marriage, or in favour of a *bona-fide* purchaser or encumbrancer in return for valuable consideration:—

Not exceeding £100	Nil.
£100 and not exceeding £1,000—	
On first £100	Nil.
On remainder	2½ per cent.
Over £1,000 and not exceeding £5,000	3½ ,,
Over £5,000 and up to £20,000	7 ,,
On £20,000 and upwards	10 ,,

with 3 per cent. additional in the case of strangers in blood, except adopted children. It is provided that no duty shall be payable on property passing absolutely into the possession of the widow of the deceased, or of the widower of the deceased; and that only half-rates shall be payable on property acquired by the children, step-children, and grand-children of the testator or intestate. It is further provided that in the case of property in which a life estate or interest is acquired by the widow on the death of her husband, or by the widower on the death of his wife, payment of duty shall be made in ordinary course if the property possesses a capital value which would give an annual return of not less than £500 if invested at 6 per cent., and when the property is of lower value the widow or widower shall obtain a refund not exceeding 50 per cent. of the duty.

Land and Income Taxation in New South Wales.

In New South Wales, land tax is levied on the unimproved value; the present rate being 1d. in the £. An exemption of £240 is allowed, and if the unimproved value is in excess of this sum a deduction equal to the exemption is made, but when a person or company holds several blocks of land only one sum of £240 may be deducted from the aggregate unimproved value. Also, when a block of land is mortgaged, the mortgagor is allowed to deduct from the amount of his tax a sum which is equal to the income tax chargeable to the mortgagee on the interest derived from the mortgage of the whole property, including improvements. The exemptions from taxation comprise Crown lands not subject to right of purchase, or held under special or conditional lease, or as homestead selections; other lands vested in Her Majesty or her

representatives; lands vested in the Railway Commissioners; lands belonging to or vested in local authorities; public roads, reserves, parks, cemeteries, and commons; lands occupied as public pounds, or used exclusively for or in connection with public hospitals, benevolent institutions, and other public charities, churches and chapels, the University and its affiliated colleges, the Sydney Grammar School, and mechanics' institutes and schools of arts; and lands dedicated to and vested in trustees and used for zoological, agricultural, pastoral, or horticultural show purposes, or for other public or scientific purposes. Should the tax remain unpaid for a period of two years after it becomes due the Commissioners may, after giving another year's notice, let the land for a period not exceeding three years, or, with the permission of a Judge of the Supreme Court, sell so much of it as may be necessary for the payment of the tax, with fines, costs, and expenses added.

A tax is also imposed upon so much of every income as may be in excess of £200, except in so far as it is derived from the ownership or use or cultivation of land upon which land tax is payable; the present rate being 6d. in the £. The exemptions include the revenues of local authorities; the income of life assurance societies and of other societies and companies not carrying on business for purposes of profit or gain, and not being income derived from mortgages; the dividends and profits of the Savings Bank of New South Wales and the Post Office Savings Bank; the funds and income of registered friendly societies and trade unions; the income and revenues of all ecclesiastical, charitable, and educational institutions of a public character; and income accruing to foreign investors from Government stock. The regulations provide that in the case of every company its income shall be taken as the income of the company in New South Wales and from investments within the colony. Public companies are not allowed the exemption of £200.

Land and Income Taxation in Victoria.

The Land Tax Act in force in Victoria was passed with the object of breaking up large holdings. For this purpose it was declared that all "landed estates" should be subject to taxation; that a "landed estate" should consist of one or more blocks of land not more than 5 miles apart which possessed an aggregate area of upwards of 640 acres and a capital value of more than £2,500; that the value in excess of £2,500 should be taxed at the rate of $1\frac{1}{4}$ per cent. per annum, but that only one exemption should be allowed to a person or company owning more than one "landed estate"; and that the assessment of the capital value of the "landed estate" should be based upon the average number of sheep which it was estimated to be able to maintain, £4 per acre being fixed as the value of land which could carry 2 sheep or more to that area; £3 per acre if it could carry only $1\frac{1}{2}$ sheep; £2 per acre if it could carry only 1 sheep, and £1 if it could not maintain an average of a single sheep to the acre.

The rate of income tax payable in the colony varies according to the source whence the income is derived and the taxable amount of such income. On incomes derived from personal exertion 4d. in the £ is payable up to £1,200 ; on every £ in excess of this sum up to £2,200, 6d. ; and on every £ in excess of £2,200, 8d. ; double these rates being payable on incomes the produce of property within the colony. All incomes of and under £200 escape taxation, and this sum is exempted in all cases in which the income is higher. Land and buildings used by the owner for residential purposes are regarded as returning an income of 4 per cent. on the capital value ; and the income of companies whose head office is not within the colony is taken to be such a proportion of the total dividends of the company as the receipts or assets and liabilities (as may be prescribed) in Victoria bear to the total receipts or assets and liabilities. It is provided that shipowners whose principal place of business is outside the colony shall pay £5 for every £100 received for the carriage of Victorian passengers, goods, and mails. In the case of sales of property, where the principal is not a resident of Victoria, the taxable amount of his income derived from such sale or disposal of property is assessed at 5 per cent. of the total amount for which the property was sold or otherwise disposed of, unless it should be proved to the satisfaction of the Commissioner that the amount received was less than 5 per cent., when a corresponding reduction will be made. The exemptions include the income of the State, local authorities, savings banks, University of Melbourne and affiliated colleges, Working Men's College, schools of mines, technical schools, religious bodies, registered friendly societies, building societies, and trade unions ; of societies and public bodies not carrying on business for purposes of gain to shareholders or members ; of mutual life assurance companies whose head offices are in Australia; of insurance companies (other than life) taking out an annual license under the Stamps Act; and of mining companies, also such dividends derived from mining companies as may not be in excess of calls paid up during the year ; and income derived by foreign investors from the stock of Government or local bodies.

Dividend Tax in Queensland.

There is no land tax in Queensland, and income tax is only collected on the dividends declared by public companies. The rate is 1s. per £ on dividends declared by all companies having their head office or chief place of business in Queensland, provided that when the operations of such a company extend beyond the colony duty shall only be payable on so much of the dividends as is proportionate to the average capital employed within the colony. In the case of companies which have not their head office in Queensland, and which are not companies carrying on insurance business only, the duty is payable on so much of the total dividends as is proportionate to the average amount of capital employed

in the colony during the year as compared with the total average capital of the company; and in the case of insurance companies duty is payable at the rate of 20s. for every £100 or part of £100 of gross premiums received. An exemption is allowed in the case of mining companies, the tax of 1s. per £ being payable only on dividends over and above those applied in repayment of the expenditure actually incurred by the company before the declaration of the first dividend in respect of labour or material employed in developing the mine, and in repayment of three-fourths of the cost of machinery erected for the raising of ores and other materials from the mine.

Land and Income Taxation in South Australia.

In South Australia the land tax is calculated on the unimproved value, the rate being ½d. in the £, with an additional tax of ½d. on every £ in excess of £5,000. The amount of tax payable by an absentee, who is defined as a person who has been absent from or resident out of the colony for two years, is increased by 20 per cent. The exemptions to the land tax comprise Crown lands which are not subject to any agreement for sale or right of purchase, park lands, public roads, public cemeteries, and other public reserves, and land used solely for religious or charitable purposes, or used by any institute under the provisions of the Institute Act of 1874. It is provided that an assessment shall be made every three years, and that the distribution of the tax shall be made according to the proprietary interest held in the land. It is further provided that if the payment of the tax has been in arrear for a period of two years the Commissioner may, after giving another year's notice of his intention, let the land from year to year, and after deducting from the rents the amount of tax, with costs and expenses, hold the balance for the benefit of the owner; or he may even go so far as to petition the Supreme Court for permission to sell so much of the land as may be necessary for the payment of the tax and costs and expenses.

The income tax varies according to the source whence the income is derived. On incomes derived from personal exertion the rate imposed is 4½d. in the £ up to and including £800, and 6d. for every £ in excess of that sum, with double these rates on incomes the produce of property. The sum exempted from taxation is £150, if the income does not exceed £300 per annum; but no exemption is allowed in the case of an income in excess of the sum named. The exemptions from taxation comprise the incomes of municipal corporations and district councils; of companies, public bodies, and societies not carrying on business for purposes of gain to be divided amongst shareholders or members; and of friendly societies. Land and buildings occupied by the owner for residential purposes are taken as returning an income of 5 per cent. on the capital value, and the income of a company is declared to be the produce of property for taxation purposes.

Land and Income Taxation in Tasmania.

The land tax payable in Tasmania is at the rate of ½d. in the £ on the total capital value of land, with a deduction of ⅙d. in the £ on account of mortgages. The exemptions comprise land the property of a municipal corporation or other local authority, or of a registered friendly society; the site of a State school under the Education Department; of a public library or museum; of the Tasmanian Museum; of a hospital or benevolent asylum or other building used solely for charitable or religious purposes, or land vested in trust for public purposes, public roads, cemeteries which are not owned by joint-stock or public companies, and public reserves, gardens, and recreation grounds. Crown lands held on lease are also exempted from taxation, but if they have been purchased on credit the occupier is required to pay tax; provided one-half of the price has been paid or has become due. The owner of the land is looked to directly for the amount of the tax, unless he resides out of the colony or cannot be found, in which case the occupier becomes responsible, but is allowed to deduct the sum from the amount of his rent. The Commissioner has power to let the land if the tax remains unpaid six months after it has become due, or, with the approval of a Judge of the Supreme Court, to sell it if the tax has remained unpaid for two years; and it is provided that the balance of the proceeds, after the amount of the tax, with costs and expenses, has been deducted, shall be handed over to the owner of the rented property or the original owner of the property which has been sold.

The Income Tax Act in force in the colony provides that 8d. per £ shall be payable on incomes derived from personal exertion, 1s. per £ on incomes the produce of property, and 1s. per £ on the profits of public companies. The chief exemptions are the revenues of municipal corporations and other local authorities; incomes of companies, societies, or public bodies or trusts not carrying on business with a view to a distribution of profits amongst their shareholders or members; the funds and incomes of registered friendly societies and trade unions; income accruing to foreign investors in Tasmanian Government stock; rents from land subject to land tax; incomes of banking and insurance companies which have not their head offices in the colony (and which are specially taxed); and incomes of persons who have not been resident in the colony for at least twelve months. It is provided that persons deriving income from sources outside the colony shall not be taxed in respect of the same if income tax has been paid upon the money in the colony or country whence it has been derived. In the case of incomes derived from personal exertion, an exemption is made of all incomes not exceeding £150; on incomes exceeding £150 and not exceeding £400, the sum of £120 escapes taxation; but all incomes exceeding £400 in amount are taxed to the full extent. Where the income is the produce of property, incomes not exceeding £100 in amount

are exempt from taxation ; but only £80 is exempted when the income exceeds £100 and does not exceed £400 ; and no exemption is allowed when the income is in excess of £400 per annum. It is also provided that, when the income is derived from both sources, no tax shall be payable if the total amount does not exceed £150 and the part derived from property is less than £100 ; but when the income from the combined sources exceeds £150 in amount and is less than £400, a certain deduction is made, provided the part derived from property is less than £100, or the part derived from personal exertion is less than £150 ; the deduction must, however, be made in such a manner that the amount of tax payable shall not be less than if the whole of such income had been derived either from property or from personal exertion.

Land and Income Taxation in New Zealand.

In New Zealand the Land and Income Tax Assessment Act imposes a tax upon incomes and an ordinary tax upon land and mortgages, the amount of which it is provided shall be fixed annually by a Rating Act ; and also an additional graduated tax upon the unimproved value of land, the rates of which are fixed by the Assessment Act. The rate of the ordinary tax upon land and mortgages at present stands at 1d. in the £ of capital value. It is provided that the owner of any land shall pay the tax on the actual value of his land, and also on the value of any mortgages which he may hold over other land, less the value of improvements, and of any mortgage which may be owing on his land. If, then, the net value does not exceed £1,500, an exemption of £500 is allowed, but for every £2 by which the net value exceeds the sum of £1,500 the exemption of £500 is reduced by £1, so that when the value reaches the sum of £2,500 there is no exemption at all. In the case of land owned and mortgages held by persons incapacitated by age, ill-health, or other cause from earning further income from business or employment, the exemption of £500 is raised to £2,000 if the annual income produced by the land and mortgages does not amount to a larger sum than £200. Mortgages are treated as land, and the holder is allowed the exemption of £500 from the ordinary tax.

The graduated land tax is imposed on all land possessing an unimproved value of £5,000 and upwards, an important difference between the two taxes being that the mortgagee escapes the graduated tax, and no deduction is allowed to the mortgagor in consideration of any sum which may be advanced on the property. It is provided that on an unimproved value of £5,000 and under £10,000, $\frac{1}{8}$d. per £ shall be payable ; on £10,000 and under £15,000, $\frac{1}{4}$d. ; £15,000 and under £20,000, $\frac{3}{8}$d. ; £20,000 and under £25,000, $\frac{1}{2}$d. ; £25,000 and under £30,000, $\frac{5}{8}$d. ; £30,000 and under £40,000, $\frac{3}{4}$d. ; £40,000 and under £50,000, $\frac{7}{8}$d. ; £50,000 and under £70,000, 1d. ; £70,000 and under £90,000, 1$\frac{1}{8}$d. ; £90,000 and under £110,000, 1$\frac{1}{4}$d. ; £110,000

and under £130,000, 1⅜d.; £130,000 and under £150,000, 1½d.; £150,000 and under £170,000, 1⅝d.; £170,000 and under £190,000, 1¾d.; £190,000 and under £210,000, 1⅞d.; and £210,000 and over, 2d. per £.; and it is further provided that an absentee, who is declared to be a person who has been absent from or resident out of the colony for a period of three years or more, shall pay a graduated tax of 20 per cent. additional to the schedule rates.

It is provided that returns of land and mortgages shall be made biennially. Purchasers of Crown lands on credit are liable to taxation, and the owner of a leasehold interest in land is liable to taxation in respect of the value of such interest. The exemptions comprise Crown lands; lands vested in the Railway Commissioners and in local governing bodies; land used solely in connection with a place of worship or a place of residence for the clergy of any religious body, or in connection with public schools established under the Education Act of 1877, or with any other school not carried on exclusively for gain or profit, but the maximum area of land exempted for the purposes of any school carried on for profit is 15 acres; the site of a university or college, or school incorporated by any Act or Ordinance, or the site of a public library, athenæum, mechanics' institute, or school of mines; a public cemetery or burial-ground; the ground or place of meeting of any agricultural society, provided it be the property of such society; the place of meeting of a friendly society or Masonic lodge, or of a registered building society; land used for the purposes of public charitable institutions constituted under the Hospitals and Charitable Institutions Act, and of other charitable institutions not carried on for gain or profit; public gardens, domains, or recreation or other public reserves not occupied by a tenant, and all public roads and streets; land owned and occupied by Maoris, and not leased to or occupied by any person other than the Maori owner; and any public railway, including the land occupied and used as permanent way and for yards, stations, and sheds, and all buildings used for the purposes of railway traffic only. Further exemptions comprise all land owned and mortgages held by any friendly society within the meaning of the Act; all land owned and mortgages held by any savings bank constituted under the Savings Bank Act of 1858; all land owned and mortgages held by the Commissioners of Sinking Funds under the Public Debts Sinking Funds Act of 1868, or by the trustees of any local authority whose revenues are exempt from taxation; and all mortgages held by or on behalf of any charitable institution.

Still another exemption is provided for, namely, all land owned and mortgages held by or on behalf of any religious body, the proceeds of which land and mortgages are devoted to the support of aged or infirm ministers, or of widows or orphan children of ministers. It is also declared that native land occupied by any other person than the Maori owner shall be subject to one-half of the ordinary land tax in respect of the Maori landowner's interest therein, while being exempt from the graduated tax, and that all mortgages held by or in trust for Maoris

shall be liable to the payment of ordinary land tax. Mortgages held by banking companies are reached by the income tax; and land owned and mortgages held by any registered building society are exempted from taxation, the profits derived by members being subject to income tax. In the event of land being undervalued, the Commissioner may give notice to the owner, within twelve months of the signing of the assessment roll, that he must increase the value of the land to the sum placed upon it by the taxation authorities. If the owner is not willing to increase the value to the sum notified by the Commissioner, he may appeal to the Resident Magistrate to assess the value; but should he neither adopt this course nor consent to the Commissioner's valuation within thirty days, the Commissioner may recommend that the Government shall purchase the land at the returned value plus 10 per cent. On the other hand, if the owner is not satisfied with the value at which the land has been assessed, whether by the Board of Review or not, he may call upon the Commissioner to reduce the valuation to a certain sum or to purchase the land at this price.

The income tax is payable upon income derived from employment and from business, including investments other than those in mortgages of land, upon which ordinary land tax is levied. An exemption of £300 is allowed to every person domiciled in the colony, this concession being withheld from absentees; but no exemption is allowed to a public company. The rate of tax is 6d. in the £ on the first taxable £1,000, and 1s. on every additional £, except in the case of public companies, which pay 1s. per £ on the whole sum. The income of public companies is declared to be the amount of dividends earned, sums carried to reserve fund, and any other profits made or income derived by such companies. To this provision exception is made in the case of banking companies, insurance companies, shipping companies, and loan, building, and investment companies. It is provided that every banking company shall be assessed for income tax at the rate of 7s. 6d. per £100 of the average of the total liabilities and assets for the four quarters of the preceding year. The shareholders of loan, building, and investment companies are personally taxed upon the amount of income derived from such societies. The regulations declare that a person or company engaged in business as the owner or charterer of shipping shall be assessed upon the income derived from such business carried on in New Zealand and with places beyond the colony; and that when the head office of a person or company engaged in such business is outside the colony the agent shall be liable to the payment of income tax of 5 per cent. of the receipts from the carriage of passengers, goods, and live stock shipped at New Zealand ports. It is also provided by these regulations that the income of every insurance company shall be taken as the income derived from business carried on in the colony, and from investments within the colony other than those in land and in mortgages of land. The exemptions to the income tax comprise the revenues of any county council, borough council, town

board, road board, harbour board, public university, public school, education board, school commissioners, licensing committee, and every other local authority receiving revenue of any kind for the purposes of or in relation to local self-government; the income of friendly societies and building societies, and of all public bodies and societies not carrying on business for purposes of gain to be divided amongst the shareholders or members; and income derived by the owner or occupier from any land on which land tax is payable, and from mortgages of such land. The income of any savings bank constituted under the Savings Bank Act of 1858, and the income of any public charitable institution, are also exempted. Also, when a person occupies for purposes of business or employment land on which he pays land tax, he is allowed to deduct from his income a sum equal to 5 per cent. on the amount on which he is liable to pay land tax. It is imperative that a person who does not reside permanently in the colony, and who offers or exposes goods for sale or disposition by sample or otherwise, shall take out an annual license, the fee for which is fixed by regulation at £50.

Revenue from Direct Taxation.

The following table shows the amount of revenue received from the various sources of direct taxation during the year 1896–7 :—

Colony.	Stamp Duties.		Land Tax.	Income Tax.	Dividend Tax.	Total.
	Probate.	Other.				
	£	£	£	£	£	£
New South Wales	143,428	186,639	139,079	279,753	.....	748,899
Victoria	86,906	175,456	115,524	179,301	.....	557,187
Queensland	114,929		.....	.....	*62,451	177,380
South Australia	100,259	28,747	75,084	85,859	.....	289,949
Western Australia.....	74,968		.....	.....	.....	74,968
Tasmania	1,993	17,130	39,353	34,506	2,306	95,288
New Zealand	265,275		†272,372	105,504	.....	643,151
Australasia	1,195,730		641,412	684,923	64,757	2,586,822

*Including £5,217 from totalisator tax. † Including £63 from property tax.

Land Revenue.

The practice of treating as ordinary revenue money derived from the sale and occupation of Crown lands obtains in all the colonies, and the money so raised forms one of the largest items of their income. The propriety of so doing is open to grave doubt, but the argument used in its justification is that the sums so obtained have enabled the Government either to construct works, which both enhance the value of the remaining public lands and facilitate settlement, or to endow municipalities, and thus enable them to carry out local works. The revenue from land sales is declining year by year, both absolutely and as compared with population. In New South Wales and South Australia the falling-off has been most noticeable; in the former colony the revenue from this source is now some £1,353,000 less than was the case in 1881, while in South Australia the revenue from land sales is under £40,000.

Adopting the division of land revenue into receipts from sales and receipts from occupation, the following table shows the income for 1881:—

Colony.	Total Land Revenue.			Land Revenue per head.								
	From Auction and other classes of sales.	Occupation, &c., of Crown lands.	Total.	From Auction and other classes of sales.			Occupation, &c., of Crown lands.			Total.		
	£	£	£	£	s.	d.	£	s.	d.	£	s.	d.
New South Wales	2,483,338	337,651	2,820,989	3	4	11	0	8	10	3	13	9
Victoria	701,276	135,194	836,470	0	16	4	0	3	2	0	19	6
Queensland	435,664	186,893	622,557	2	0	6	0	17	5	2	17	11
South Australia	651,914	97,042	748,956	2	8	9	0	7	3	2	16	0
Western Australia	5,750	34,695	40,445	0	3	11	1	3	6	1	7	5
Tasmania	37,269	39,487	76,756	0	6	5	0	6	9	0	13	2
New Zealand	376,461	174,479	550,940	0	15	4	0	7	1	1	2	5
Australasia	4,691,672	1,005,441	5,697,113	1	14	2	0	7	4	2	1	6

Compared with 1881, the land revenue for 1896–7 shows a large decline, in all amounting to £1,953,397. The falling-off is found entirely in the amount of revenue from sales, that derived from rents having largely increased. However, general remarks applicable to all the colonies can scarcely be made. New South Wales obtained £2,483,338 from land sales in 1881, out of a total of £4,691,672 for all the colonies, or more than one-half; while from occupation its revenue was £337,651 out of £1,005,441, or little more than one-third. In 1896-7 the revenue of the

colony from sales amounted to £1,129,925—still a large amount, but £1,353,413 short of the receipts of 1881. In regard to occupation, a different condition of things is disclosed. The receipts in New South Wales during 1896-7 totalled £768,854, or an increase of £431,203 as compared with 1881, and amounting to 40 per cent. of the total for Australasia. The following are the figures for 1896–7 :—

Colony.	Total Land Revenue.			Land Revenue per head.								
	From Auction and other classes of sales.	Occupation, &c., of Crown lands.	Total.	From Auction and other classes of sales.			Occupation, &c., of Crown lands.			Total.		
	£	£	£	£	s.	d.	£	s.	d.	£	s.	d.
New South Wales	1,129,925	768,854	1,898,779	0	17	5	0	11	10	1	9	3
Victoria	306,387	106,585	412,972	0	5	2	0	1	10	0	7	0
Queensland	131,753	382,686	514,439	0	5	7	0	16	2	1	1	9
South Australia	36,056	141,461	177,517	0	2	0	0	7	10	0	9	10
Western Australia	103,262	294,271	397,533	0	15	0	2	2	8	2	17	8
Tasmania	29,974	39,548	69,522	0	3	8	0	4	10	0	8	6
New Zealand	109,521	163,433	272,954	0	3	1	0	4	7	0	7	8
Australasia	1,846,878	1,896,838	3,743,716	0	8	7	0	8	9	0	17	4

In all the colonies, New South Wales and Victoria excepted, a general sinking fund is established to assist in the redemption of public loans on maturity, and in New South Wales special sinking funds have been inaugurated in connection with portions of the local funded stocks. The desirability of establishing a general sinking fund is on all sides admitted, and a portion of the proceeds of lands sales could with advantage be set apart from the general revenue and devoted to this purpose. Victoria deals with a portion of the proceeds from the sale of Crown lands apart from the general revenue, and in 1891 a sum of £578,740 derived from that source had been placed to the credit of the Railway Construction Account; while since that year various sums have been appropriated on account of the "Land Sales by Auction Fund" for expenditure on public works.

Heads of Expenditure.

The amount disbursed by the Government of New South Wales is far larger than that expended by any other colony of the group; in the last financial year it exceeded the expenditure of Victoria by £2,325,507, was more than twice as great as that of New Zealand, and was about equal to the united expenditure of Queensland, South Australia, and Western Australia. This is chiefly owing to the large extent of settled territory in the colony, and the system of centralisation already referred

to. Below will be found a statement of the expenditure of each colony during the financial year 1896–7 :—

Colony.	Railways and Tramways.	Posts and Telegraphs.	Public Instruction.	Interest and charges on Public Debt.	All other Services.	Total Expenditure.
	£	£	£	£	£	£
New South Wales	1,800,027	686,894	716,760	2,404,953	3,531,716	9,140,350
Victoria	1,562,671	489,911	538,684	1,892,092	2,331,485	6,814,843
Queensland	682,646	309,839	220,219	1,263,659	1,127,901	3,604,264
South Australia	639,602	204,132	153,560	1,018,555	763,261	2,779,110
Western Australia	580,147	313,203	40,260	251,172	1,654,671	2,839,453
Tasmania	122,452	64,506	37,657	339,668	185,961	750,244
New Zealand	776,748	352,386	457,482	1,725,597	1,171,768	4,483,981
Australasia	6,164,293	2,420,871	2,164,622	8,895,696	10,766,763	30,412,245

It will be seen from the foregoing statement that 20·3 per cent. of the whole expenditure is for working the railways of the colonies—a service not undertaken by the Government in the United Kingdom and the United States. Posts and telegraphs absorb 8·0 per cent., while public instruction accounts for 7·1 per cent., and interest on the public debt, 29·2 per cent.

Adopting the classification of expenditure used in the preceding table, the amounts per inhabitant of each province are given below. It may be here mentioned that in New South Wales, and to some extent in South Australia and Western Australia, the tramways are the property of the State, and are under the same management as the railways, with which they are included in the various statements in this sub-chapter relating to revenue and expenditure :—

Colony.	Railways and Tramways.			Posts and Telegraphs.			Public Instruction.			Interest and charges on Public Debt.			All other Services.			Total Expenditure.		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
New South Wales	1	7	9	0	10	7	0	11	1	1	17	1	2	14	5	7	0	11
Victoria	1	6	7	0	8	4	0	9	2	1	12	3	1	19	8	5	16	0
Queensland	1	8	11	0	13	2	0	9	4	2	13	6	2	7	9	7	12	8
South Australia	1	15	6	0	11	4	0	8	6	2	16	7	2	2	5	7	14	4
Western Australia	4	4	1	2	5	5	0	5	10	1	16	5	11	19	11	20	11	8
Tasmania	0	15	0	0	7	11	0	4	7	2	1	7	1	2	9	4	11	10
New Zealand	1	1	11	0	10	0	0	12	11	2	8	9	1	13	1	6	6	8
Australasia	1	8	7	0	11	2	0	10	0	2	1	3	2	9	11	7	0	11

The most remarkable feature in the general expenditure of the Australasian colonies is the largeness of the amount required to pay interest and charges on the public debt, both in regard to the rate per head and the proportion of total revenue thus hypothecated. The proportion for Australasia is 29 per cent. of the total expenditure, or £2 1s. 3d. per head of population. The actual expenditure for each

colony during 1896–7 was as shown below. The amounts given are actual payments made during the financial year, and do not represent the interest liabilities of that period, the amounts of which will be found on page 390 :—

Colony.	Interest and Charges on Public Debt.		
	Total.	Per head of Population.	Proportion of Total Expenditure.
	£	£ s. d.	per cent.
New South Wales	2,404,953	1 17 1	26·31
Victoria	1,892,092	1 12 3	27·76
Queensland	1,263,659	2 13 6	35·06
South Australia	1,018,555	2 16 7	36·65
Western Australia	251,172	1 16 5	8·84
Tasmania	339,668	2 1 7	45·27
New Zealand	1,725,597	2 8 9	38·48
Australasia	8,895,696	2 1 3	29·25

A casual glance at the figures quoted will lend colour to the suggestion sometimes hazarded that the colonies are too rapidly mortgaging their resources, and that the expense of the public debt will prove a greater burthen than can easily be borne. However true this may be as far as any individual colony is concerned, it is certainly erroneous as regards the whole of Australasia. Out of the sum of £8,895,696 required to pay interest and charges on the public debt during 1896–7, £4,330,319 was directly recouped by the net revenue from public railways, while water supply and sewerage yielded a further sum of £284,591, making a total of £4,614,910. Besides this, there is a large indirect revenue obtained by each of the colonies from the opening-up of its public lands, and from the construction of breakwaters, lighthouses, bridges, and other works of public utility. But even these advantages might have been bought at too high a price if production had not correspondingly advanced. Fortunately such has been the case, as will be seen from the chapters in this volume which deal with the leading items of Australasian production.

Adjusted Revenue and Expenditure.

The form in which the public accounts of the colonies are presented has led to a great deal of misconception regarding the actual requirements of the various Governments for public purposes. Nor has it been possible to do other than follow that form in the foregoing pages, as otherwise the figures quoted would differ from the various Treasury statements, and add another element of confusion; nevertheless, it would be well before closing the remarks on this branch of public finance to make a separation of the items of revenue and expenditure

according to the principles which should govern the presentation of the public accounts. This is effected by treating the services which are generally regarded as outside the functions of the central Government, namely, railways and tramways, and water supply and sewerage, as matters apart from the general receipts and expenditure, and only crediting the State with the surplus from, or debiting it with the cost of these services, after deducting working expenses and making allowance for interest on the invested capital. Posts and telegraphs have not been excluded, as they are matters of governmental administration in nearly all countries. The adjusted revenue for the year 1896–7 will be found below :—

Colony.	Revenue, excluding Services.*	Net Revenue from Services.*	Total adjusted Revenue.	Per head of Population.
	£	£	£	£ s. d.
New South Wales	5,486,738	4,422	5,491,160	4 4 8
Victoria	4,032,962	.....	4,032,962	3 8 8
Queensland	2,476,289	.....	2,476,289	5 4 11
South Australia	1,561,202	.....	1,561,202	4 6 8
Western Australia	1,903,605	175,255	2,078,860	15 1 5
Tasmania	636,991	.....	636,991	3 17 11
New Zealand	3,438,659	.....	3,438,659	4 17 1
Australasia	19,536,446	179,677	19,716,123	4 11 5

* Railways, tramways, water supply and sewerage.

It will be seen that the only colonies which obtained a revenue from these services during 1896–7, after working expenses and interest on capital had been allowed for, were New South Wales and Western Australia—a position due to the increased traffic on the railway lines. The next table shows the adjusted expenditure :—

Colony.	Expenditure, excluding Services.*	Net Expenditure on Services.*	Total adjusted Expenditure.	Per head of Population.
	£	£	£	£ s. d.
New South Wales	5,524,302	.....	5,524,302	4 5 2
Victoria	3,822,009	395,579	4,217,588	3 11 10
Queensland	2,151,405	315,998	2,467,403	5 4 6
South Australia	1,455,746	185,807	1,641,553	4 11 2
Western Australia	2,076,162	.....	2,076,162	15 1 0
Tasmania	474,936	114,323	589,259	3 12 1
New Zealand	3,106,975	89,866	3,196,841	4 10 3
Australasia	18,611,535	1,101,573	19,713,108	4 11 4

* Railways, tramways, water supply and sewerage.

The figures just given show that the actual cost of government is materially less in the colonies than would appear from the ordinary statement of revenue and expenditure.

Position of Revenue Accounts.

The following table has been compiled with the view of showing the position of the Revenue Account of each colony at the close of the last financial year. It will be seen that five of the colonies have large overdrafts, partly cash and partly in the form of treasury bills, and that to establish the necessary equilibrium between income and outgo a restricted expenditure by future administrations will be absolutely necessary. For Tasmania the figures refer to the end of the year 1896; for New Zealand, to the 31st March, 1897; and for the other five colonies, to the 30th June, 1897. The figures given in the last column of the table represent the total debit balances at these dates. It is very necessary that this fact should be borne in mind, as it often happens that the official statements of the colonies show only the cash overdraft, the amount represented by outstanding treasury bills being omitted from consideration :—

Colony.	Cr. Balance.	Dr. Balance.		
		Overdraft liquidated by Treasury Bills.	Cash Overdraft.	Total Dr. Balance.
	£	£	£	£
New South Wales	114,445	2,477,584	.....	2,477,584
Victoria	.....	500,000	2,152,968	2,652,968
Queensland	.....	.....	286,722	286,722
South Australia	.....	.....	485,856	485,856
Western Australia	315,362	.....	.....	.....
Tasmania	.....	.....	394,371	394,371
New Zealand	354,286	.....	.....	.....
Total	784,093	2,977,584	3,319,917	6,297,501

It will be seen that for the colony of New South Wales the table shows an overdraft of £2,477,584 which has been liquidated by treasury bills, while at the same time the revenue account had a credit balance of £114,445 at the close of the financial year. This is explained by the fact that the Government have decided not to apply this credit balance to the redemption of any part of the outstanding bills, which were issued to cover deficiencies of previous years, but to carry the balance to the next year. In reference to the South Australian cash overdraft of £485,856, it should be pointed out that this is obtained by a credit balance of £3,656 for the colony proper, after paying £20,000 to the Public Debt Sinking Fund, and a debit balance of £489,512 for the Northern Territory. Also, in the case of Tasmania, it is necessary to mention that the cash overdraft of £394,371 shown

above was covered by treasury bills and local inscribed stock to the amount of £469,808, which had been issued and were outstanding at the end of the year. The proceeds from these sales had not, however, been brought to account on the 31st December, 1896.

The condition of the revenue accounts of New South Wales, Victoria, and New Zealand needs further explanation. In New South Wales land was resumed in 1889 for the purpose of facilitating certain improvements in connection with a street facing the General Post-office, Sydney, and it was determined that the sum paid for resumption should not be treated as a matter of ordinary expenditure, but be held in suspense pending the sale of the land resumed, or so much of it as was not needed for the formation of the Post-office street. Another resumption of land by the Government of New South Wales was authorised by the Centenary Celebration Act of 1887, which provided for the acquisition of a large area of land, close to Sydney, for the formation of a public park to commemorate the centenary of the colony. Of the area so acquired, 640 acres were to be set aside for the park, and the remainder was to be sold, and the proceeds placed against the expenditure. So far no sales have been effected, and in 1894 the payments on account of the formation of the park were transferred from the Consolidated Revenue Fund Account to a special suspense account. On the 30th June, 1897, the debit balance of the Centennial Park Account was £224,372, and of the General Post-office New Street Resumption Account, £469,263, neither of which amounts is included in the above table. In Victoria certain public works were undertaken on the understanding that the cost should be defrayed from the proceeds of the sale of certain lands specifically set apart for the purpose. These works have been constructed, but the sales have fallen short to the extent of £451,378, and this sum has been placed to a suspense account, which is likewise excluded from the debit balance given above. In the credit balance of New Zealand, shown on page 385, allowance has been made for the transactions of several suspense accounts, but in order to place the revenue and expenditure of that colony on the same footing as those of the other provinces, the operations on the accounts referred to have not been taken into consideration in the tables on page 365.

The practice of issuing Treasury bills for the purpose of liquidating an overdraft, which is illustrated by the above table, obtains in all the colonies, the bills being in this respect somewhat like the exchequer bills issued by the British Treasury. This, however, is the only point of resemblance between the two. The British exchequer bills bear interest at a rate which is fixed from year to year, and at the end of every twelve months the holder has the option of retaining them or presenting them at the Treasury for payment. They are, therefore, readily saleable, and are used with great freedom in commercial transactions, for, as will be seen, they combine the two advantages of ready money and money bearing interest. The Treasury bills of these colonies, on the other hand, are only payable at the Treasury on the expiry of

the period for which they are issued, and they carry interest at a fixed rate during the whole term of currency; consequently they are not used to any extent in commerce. The nearest approach to the British system seems to prevail in New Zealand. Treasury bills are generally regarded as unfunded or floating debt, and until wiped off form part of the public debt.

Trust Funds.

It may be pointed out here that all the Governments in Australasia hold sums in trust, either directly or indirectly. In some instances these sums are considerable, and are found extremely useful in adjusting the finances, forming a strong reserve which a Government is able to use in tiding over temporary difficulties. It is, however, very questionable whether the existence of a large balance out of which a necessitous Treasurer can make advances to an overdrawn revenue or loans account, is desirable. In past years it has led to much extravagance that a Treasurer forced to rely on the legitimate revenue of the country would have been compelled to avoid. Several colonies have seen this, and in New Zealand and South Australia public trustees have been appointed to control Trust Funds in the hands of the Government; but in the other colonies these funds are directly subject to the Treasury. The following are the balances of the Trust Funds on the 30th June, 1897, so far as they can be ascertained:—

	£
New South Wales	8,672,742
Victoria	5,342,611
Queensland	2,901,053
South Australia	311,581
Western Australia	1,657,177

Growth of Public Debt.

The practice of raising money for State purposes by means of public loans was begun in 1842, when New South Wales issued debentures redeemable in two years and bearing interest at the rate of 8 per cent. per annum. The sum raised—£45,900—was devoted to immigration purposes. This, as well as the succeeding loans, nine in number, raised prior to 1855, was obtained locally; in the year named, however, New South Wales placed on the London market the first instalment of a 5 per cent. loan for £683,300, which was the first external loan raised, and may be rightly said to mark the commencement of the present Australasian indebtedness.

So far as most of the colonies are concerned, their public debts date from about the time of their assuming the control of their own affairs; but Western Australia, which obtained responsible government in 1890, incurred liabilities in London as far back as 1872. In the case of that colony, however, the granting of Parliamentary government was unduly

delayed. The following table is interesting as showing the liabilities of each of the provinces at the date of its taking charge of its own affairs:—

Colony.	Date of obtaining Responsible Government.	Amount of Debt Liability at that date.
		£
New South Wales	1855	1,366,770
Victoria	1855	480,000
Queensland	1859	Nil
South Australia	1856	294,900
Western Australia	1890	1,367,444
Tasmania	1855	Nil
New Zealand	1856	Nil

No feature of Australasian finance is so astonishing as the growth of the public indebtedness, and this fact has formed the gravamen of the many indictments which have been urged against the colonies during recent years. The debts have undoubtedly grown at a much more rapid pace than the population; but as the colonies were in an entirely undeveloped state when public borrowing first came into favour, the more rapid growth of their indebtedness as compared with the population was in a sense the corollary of the position taken up by the various Governments—that the State should reserve to itself the construction of railways and similar undertakings which in other countries are prosecuted by private enterprise. Even with this explanation, however, the figures in the following statement are sufficiently striking:—

Colony.	1861.	1871.	1881.	1891.	1896-7.
	£	£	£	£	£
New South Wales	4,017,630	10,614,330	16,924,019	52,950,733	61,074,498
Victoria	6,345,060	11,994,800	22,426,502	43,638,897	47,529,321
Queensland	70,000	4,047,850	13,245,150	29,457,134	33,498,414
South Australia	866,500	2,167,700	11,196,800	20,347,125	24,414,000
Western Australia	Nil	Nil	511,000	1,613,594	7,310,815
Tasmania	Nil	1,315,200	2,003,000	7,110,290	8,251,778
New Zealand	600,761	8,900,991	29,659,111	38,844,914	44,366,618
Australasia	11,899,951	39,040,871	95,965,582	193,962,687	226,445,444

The amounts for the year 1896–7 represent both funded and unfunded debt. In round figures the increase from 1861 to 1871 was 27 millions; from 1871 to 1881, 57 millions; from 1881 to 1891, 98 millions; and from 1891 to 1897, 32 millions. It must be pointed out that the figures in the last column show the public indebtedness as represented by outstanding debentures or stock; but the real sum is less by the amount of sinking funds in the case of all the colonies except Victoria, viz., New Zealand, £814,294; Queensland, £70,393;

South Australia, £204,989; Western Australia, £205,637; and Tasmania, £128,662. In New South Wales, sinking funds have been established in connection with some of the recent loans for the purpose of extinguishing portions of the expenditure on works of an unproductive character, the total amount accrued to 30th June, 1897, being £28,022. There are also annual payments on account of two of the railway loans and the treasury bills in aid of revenue, but the instalments are deducted annually, and the net indebtedness shown in the statement of the public debt.

The figures showing the total amount of the debt of each colony would be incomplete without corresponding information respecting the debt per head of population. In 1861 the public debt of Australasia stood at £9 8s. per inhabitant; in 1871, at £19 16s. 4d.; in 1881, at £34 0s. 2d.; in 1891, at £49 14s. 11d.; while in 1897 it was £52 9s. 8d. For each colony the figures are as follow :—

Colony.	1861.	1871.	1881.	1891.	1896-7.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
New South Wales	11 4 5	20 10 0	21 14 8	45 8 10	46 12 1
Victoria	11 14 3	16 0 11	25 9 7	37 13 11	40 8 7
Queensland	2 0 9	32 6 11	58 7 2	71 15 9	70 0 4
South Australia ...	6 16 8	11 13 7	39 2 1	62 9 2	67 10 3
Western Australia	Nil.	Nil.	17 0 6	30 5 8	48 15 2
Tasmania	Nil.	12 18 5	16 16 10	46 11 9	49 13 6
New Zealand	6 1 4	33 6 9	59 4 2	61 5 3	61 16 5
Australasia ...	9 8 0	19 16 4	34 0 2	49 14 11	52 9 8

Of the £226,445,444 which constituted the debt of Australasia in 1897, £222,195,540 represented funded debt raised either as debentures or as funded or inscribed stock, and £4,249,904 unfunded or floating debt. The particulars for each colony will be found below. With regard to the treasury bills shown as outstanding in Tasmania, it has already been pointed out that these are held to liquidate the accumulated revenue deficiency shown on page 385 :—

Colony.	Date.	Debenture Bonds.	Inscribed and Funded Stock.	Treasury Bills.		Total.
				For Works.	In aid of Revenue.	
		£	£	£	£	£
New South Wales..	30 June, 1897	10,695,150	47,896,764	*5,000	2,477,584	61,074,498
Victoria	30 June, 1897	20,703,795	26,225,526	100,000	500,000	47,529,321
Queensland	30 June, 1897	11,434,380	22,064,034	.....	.....	33,498,414
South Australia ..	30 June, 1897	11,184,600	12,729,400	500,000	.....	24,414,000
Western Australia..	30 June, 1897	370,900	6,447,595	492,320	.....	7,310,815
Tasmania	31 Dec., 1896	3,325,670	4,751,108	.....	175,000	8,251,778
New Zealand	31 Mar., 1897	7,528,529	36,838,089	.....	.....	44,366,618
Australasia		65,243,024	156,952,516	1,097,320	3,152,584	226,445,444

* Overdue.

The relative burthen of the public debt of the various colonies is not to be determined only by comparing the gross amounts with the population, for the rate of interest payable must also be taken into consideration. Thus the general average interest payable by New South Wales is 3·67 per cent., while South Australia pays 3·94 per cent., so that a debt of £100 in the former is not more burthensome than £93 2s. 11d. in the latter colony. A more exact basis of comparison is obtained by taking the interest liability, which is shown below. The interest given is on the supposition that the debt is outstanding for the whole of the year following the day on which the amounts are made up. The whole debt, funded and unfunded, has been included :—

Colony.	Average rate of Interest.			Amount of Interest.	
	Funded Debt.	Unfunded Debt.	Total.	Amount on Outstanding Liabilities.	Per Inhabitant.
	per cent.	per cent.	per cent.	£	£ s. d.
New South Wales	3·69	3·15	3·67	2,241,933	1 14 5
Victoria	3·88	4·08	3·88	1,845,087	1 11 5
Queensland	3·79	.....	3·79	1,271,244	2 13 2
South Australia	3·93	4·56	3·94	962,979	2 13 3
Western Australia	3·55	4·01	3·59	262,142	1 15 0
Tasmania	3·81	4·33	3·82	315,222	1 17 11
New Zealand	3·92	.....	3·92	1,738,622	2 8 5
Australasia	3·82	3·60	3·81	8,637,229	1 19 8

In 1884 the nominal rate of interest on New South Wales loans was fixed at 3½ per cent., at which rate stock to the amount of £29,326,200 had been sold to June, 1897. This example was not followed by any of the other colonies until 1888, when Queensland successfully floated a loan of £2,520,000 at the reduced rate; and in 1889 Victoria, South Australia, Tasmania, and New Zealand, in the order named, were successful in issuing stock at a similar nominal rate. Through the pressure of the financial crisis, the nominal rate for those colonies which issued in 1893 was increased to 4 per cent. Early in the following year, however, South Australia and Tasmania again placed loans on the market at the lower rate. New Zealand, in May, 1895, was the first colony to issue a 3 per cent. loan—an example which was followed by New South Wales in October of the same year, and by Western Australia in May, 1896, and May, 1897. South Australia also has issued 3 per cent. stock to the amount of £1,946,300. In June, 1897, Queensland floated a 3 per cent. loan of £1,500,000 in London, and local stocks were also issued at the same rate of interest. In Victoria and Tasmania local stocks, bearing interest at 3 per cent., were sold in 1896 and 1897. Below will be found the amount of the total debt under each rate of

interest. For Tasmania the figures refer to the 31st December, 1896; for New Zealand, to the 31st March, 1897, and for all the other colonies, to the 30th June, 1897 :—

Rate of Interest.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.	Australasia.
				FUNDED DEBT.				
℔ cent.	£	£	£	£	£	£	£	£
Nil.	3,650	.....	.....	.....	....	.....	4,500	8,150
6	94,500	.....	.....	849,400	32,500	179,900	128,200	1,284,500
5½	4,500	.....	.....	.....	....	.....	.....	4,500
5	2,289,200	.....	.....	290,000	83,100	100	937,700	3,600,100
4½	3,700	5,000,000	.....	.....	83,400	.....	1,874,534	6,961,634
4	21,065,439	27,930,857	21,384,300	17,464,400	3,019,495	4,144,970	31,513,102	126,522,563
3½	29,326,200	12,000,000	10,489,634	3,363,900	750,000	3,699,300	8,381,962	68,010,996
3	5,804,725	1,998,464	1,624,480	1,946,300	2,850,000	52,508	1,526,620	15,803,097
Total	58,591,914	46,929,321	33,498,414	23,914,000	6,818,495	8,076,778	44,366,618	222,195,540
				UNFUNDED DEBT—Treasury Bills.				
Nil.	5,000	.....	.....	.....	....	.....	.....	5,000
4·5625	....	.....	.....	500,000	....	.....	.....	500,000
4½	.....	250,000	.....	.....	12,320	97,470	.....	359,790
4¼	.....	.....	.....	.....	....	34,430	.....	34,430
4	388,500	250,000	.....	.....	480,000	43,100	.....	1,161,600
3¼	.....	100,000	.....	.....	....	.....	.....	100,000
3	2,089,084	.....	.....	.....	....	.....	.....	2,089,084
Total	2,482,584	600,000	.....	500,000	492,320	175,000	.....	4,249,904
Total Debt	61,074,498	47,529,321	33,498,414	24,414,000	7,310,815	8,251,778	44,366,618	226,445,444

The treasury bills of New Zealand do not rightly form part of the public debt, and such of these as were outstanding have therefore been excluded from the foregoing statement.

REDEMPTION OF LOANS.

Loans are either redeemed or renewed. In the former case, the amount of the obligations of the State to its public creditors is reduced; in the latter case, the liability remains the same or is only slightly altered. Repayments, however, are chiefly effected under the head of renewals, the amount of loans redeemed from revenue—by sinking fund, annual drawings, or directly from the general account—being small. The principle of extinguishing public debt by the operation of sinking funds or by annual drawings is not general in Australasia, and in the colonies in which it has been adopted the loans affected do not amount to a large sum. In the case of sinking funds the money is held until the date of redemption; but exactly the opposite course is followed where annual drawings are provided, for in such cases the Government

retire a certain amount of their debentures yearly, and thus effect a gradual extinction of the loan. As already explained, all the colonies except Victoria have sinking funds in operation, the amounts to the credit of which will be found on page 388. The system of annual drawings has been adopted to a very limited extent only by New Zealand, New South Wales, and Western Australia.

With the exception of one or two small amounts of perpetual or interminable stock, all the Australasian loans are redeemable at prescribed dates; hence the Governments frequently find themselves at the mercy of an adverse market when they are compelled to raise a loan to pay off stock falling due. Within the last few years, however, practical steps have been taken by Victoria, South Australia, Western Australia, and Tasmania to avoid this disability, the Governments of those colonies, in their late issues, having reserved to themselves the option of redeeming at a minimum or a maximum date, or any intervening period, on giving the necessary six or twelve months' notice. Canada was the first of the British possessions to introduce this principle.

Dates of Maturity.

Australasian loans have been issued for fixed periods, and the amount maturing in each year is given in the following statement. No combined action is taken to regulate the raising of loans, each colony acting according to the exigencies of its Government, regardless of the financial condition of its neighbours. The placing of a loan on the London market, especially if it be for a large amount, generally results in an all round fall in the prices of Australasian stocks, and subsequent issues of other colonies are placed at a disadvantage if the market is approached before it has recovered its tone; in fact, the colonies have in this respect all the evils of disintegration and all the liabilities of federation, without any of the advantages which federation would give. It would be useless to discuss the amount falling due in any year, large though it may be, unless for a period close at hand, as existing conditions will eventually become so intolerable that some change must perforce be made. Happily, the amounts to be redeemed during the next decade are moderate, and the fact of heavy obligations requiring to be met in any remote year may prove of advantage, as it will simplify negotiations when the time is ripe for the conversion of Australasian loans into one consolidated stock. Only one colony—New Zealand—is at present systematically working with this end in view, but so far it has treated the question from a provincial standpoint only. The principle of adopting a minimum and a maximum date for repayment has been so recently introduced that, in the table now given, no attempt has been made to specially show the amounts to which it is applicable, the period of redemption in each case being assumed to be the more remote date.

Due Dates.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.	Australasia.
				FUNDED DEBT.				
	£	£	£	£	£	£	£	£
Overdue	3,650	.....	.....	.....	....	....	4,500	8,150
1897	.....	120,062	.....	.....	....	50,177	263,032	433,271
1898	179,700	.....	.....	140,000	....	157,954	2,265,100	2,742,754
1899	197,700	1,500,000	.....	1,140,000	....	26,267	724,292	3,588,259
1900	861,600	.....	.....	60,000	....	74,040	141,800	1,137,440
1901	420,900	3,000,000	.....	67,300	32,500	122,028	.....	3,642,728
1902	459,000	.....	.....	65,000	34,000	32,000	250,000	840,000
1903	1,003,700	.....	.....	65,000	31,500	58,240	.....	1,158,440
1904	58,000	5,457,000	.....	62,500	....	24,040	.....	5,601,540
1905	903,800	.....	.....	72,500	17,600	61,282	101,600	1,156,782
1906	224,900	.....	.....	37,500	....	....	.....	262,400
1907	.....	4,000,000	.....	1,037,500	....	....	1,000,000	6,037,500
1908	1,450,000	2,000,000	.....	1,951,100	....	300,000	500,000	6,201,100
1909	1,799,500	.....	.....	3,122,700	....	....	40,000	4,962,200
1910	2,863,700	.....	.....	60,300	....	....	322,405	3,246,405
1911	.....	.....	.....	68,300	....	1,000,000	.....	1,068,300
1912	3,993,755	.....	.....	85,000	....	....	.....	4,078,755
1913	.....	4,000,000	1,466,500	47,000	....	546,650	506,500	6,566,650
1914	.....	.....	.....	35,000	....	800,000	340,800	1,175,800
1915	.....	.....	11,728,800	35,000	....	....	3,800	11,767,600
1916	.....	.....	.....	3,070,100	....	....	12,200	3,082,300
1917	.....	.....	.....	1,365,800	....	....	.....	1,365,800
1918	12,826,200	.....	.....	1,476,900	....	....	.....	14,303,100
1919	.....	4,000,000	.....	26,000	....	....	.....	4,026,000
1920	.....	6,000,000	.....	337,200	....	300,000	.....	6,637,200
1921	.....	.....	.....	.....	....	....	500,000	500,000
1923	.....	7,746,795	.....	.....	....	....	.....	7,746,795
1924	16,698,065	.....	12,973,834	1,651,300	....	....	.....	31,323,199
1925	222,255	.....	.....	.....	....	....	.....	222,255
1926	.....	7,107,000	.....	839,500	....	67,600	.....	8,014,100
1929	.....	.....	.....	200,000	....	....	29,150,302	29,350,302
1930	.....	.....	3,704,800	.....	....	....	.....	3,704,800
1931	.....	.....	.....	.....	1,876,000	....	.....	1,876,000
1933	9,686,300	.....	.....	.....	....	....	.....	9,686,300
1934	.....	.....	.....	.....	971,595	....	.....	971,595
1935	4,000,000	.....	.....	1,560,400	2,500,000	....	.....	8,060,400
1936	.....	.....	.....	2,515,200	1,100,000	....	.....	3,615,300
1939	.....	.....	.....	2,719,800	....	....	.....	2,719,800
1940	.....	.....	.....	.....	....	4,456,500	6,161,167	10,617,667
1945	.....	.....	2,000,000	.....	....	....	1,526,620	3,526,620
1947	.....	.....	1,624,480	.....	....	....	.....	1,624,480
Interminable	532,889	.....	.....	.....	....	....	.....	532,889
Annual Drawings	206,300	.....	.....	.....	255,300	....	552,500	1,014,100
Undefined ..	.....	1,998,464	.....	.....	....	....	.....	1,998,464
Total	58,591,914	46,929,321	33,498,414	23,914,000	6,818,495	8,076,778	44,366,618	222,195,540
				UNFUNDED DEBT. *(Treasury Bills.)*				
Overdue	5,000	.....	.....	.....	....	....	.....	5,000
1897	.....	.....	.....	.....	....	30,000	.....	30,000
1898	.....	250,000	.....	250,000	492,320	45,000	.....	1,037,320
1899	.....	25,000	.....	.....	....	50,000	.....	75,000
1900	.....	25,000	.....	250,000	....	50,000	.....	325,000
1901	.....	25,000	.....	.....	....	....	.....	25,000
1902	.....	25,000	.....	.....	....	....	.....	25,000
1903	.....	250,000	.....	.....	....	....	.....	250,000
Annual payments	2,477,584	.....	.....	.....	....	....	.....	2,477,584
Total	2,482,584	600,000	.....	500,000	492,320	175,000	.....	4,249,904
Total Debt	61,074,498	47,529,321	33,498,414	24,414,000	7,310,815	8,251,778	44,366,618	226,445,444

Expenses of Negotiation.

From 1855, when the first New South Wales loan was placed on the London market, until the present time, the Australasian colonies have obtained from this source nearly the whole of the money which they have borrowed. In only two of the provinces—New South Wales and New Zealand—does the amount of the outstanding loans locally subscribed form more than 10 per cent. of the sum in which the colony stands indebted. In New South Wales the total local borrowings only come to £7,935,798; in Victoria, to £3,465,321; in Queensland, £1,624,280; in South Australia, £1,952,900; in Western Australia, £575,320; in Tasmania, £688,728; and in New Zealand, £5,526,529, making altogether a sum of £21,768,876, or 9·6 per cent. of the total debt of Australasia. This dependence on the English market was originally due to lack of local capital; but of late years, when such capital has been fairly abundant, the Governments have still turned to London, where the rate of interest at which they could borrow has been much below what would have been demanded by the Australian capitalist.

The charges incidental to the floating of an inscribed stock loan in England are heavy. The chief expense is the stamp duty of 12s. 6d. per cent. imposed by the British Government on inscribed stock, the other charges being for services rendered. New South Wales, Queensland, and New Zealand issue their stock through the Bank of England; the London and Westminster Bank acts for Victoria and Western Australia; South Australia issues its loans through its Agent-General in London; while in the case of Tasmania also the Agent-General is the channel through whom the loans are placed, but he has the assistance of the London and Westminster Bank.

The cost of negotiation by the Bank of England is $\frac{1}{2}$ per cent. commission; and by the London and Westminster Bank, $\frac{1}{4}$ per cent. Brokerage costs $\frac{1}{4}$ per cent. In addition to these charges and the stamp duty referred to above, there has usually to be added 4d. or 5d. per £100 for incidental expenses. The charges annually made by the Bank of England for the inscription and management of stock and the payment of the half-yearly dividends are £600 per million for the first ten millions, £550 for the next five, and £500 per million for all subsequent amounts. The charges of the London and Westminster Bank are £500 per million for the first ten millions, £450 for a second like sum, and £400 per million for any subsequent amount. From the 1st March and 1st May, 1895, respectively, the Governments of New South Wales and New Zealand obtained a reduction of charges from the Bank of England, bringing them slightly below those of the London and Westminster Bank. The reduced charges are:—£500 per million for the first ten millions, £450 per million for the next five millions, and £400 per

million for amounts over £15,000,000. At the end of 1897, the Victorian Government arranged with the London and Westminster Bank to reduce its rates for inscription of stock to £250 per million, without regard to the total amount inscribed.

On the old form of debenture the stamp duty imposed is 2s. 6d. per cent., or £1,250 per million. The expenditure per £100 debentures or inscribed stock of those colonies for which information is obtainable is given in the subjoined table. The debenture loans shown are some of the last issued. It will be seen that the cost of floating inscribed stock loans is much greater than that under the debenture system, but the extra outlay is inappreciable when compared with the advantages gained :—

Colony.	Year of Negotiation.	Principal.		Expenses per £100 Debenture and Stock.	Class of Stock.
		Rate of Interest.	Amount.		
			£	£ s. d.	
New South Wales	1883	4	2,000,000	0 11 5	Debentures.
	1889	3½	3,500,000	1 7 10	Inscribed.
	1891	3½	4,500,000	1 7 9	do.
	1893	4	2,500,000	1 8 0	do.
	1894	3½	832,000	1 9 5	do.
	1895	3	4,000,000	1 7 10	do.
Victoria	1880	4½	2,000,000	0 17 9½	Debentures.
	1891	3½	3,000,000	1 2 9	Inscribed.
	1892	3½	2,000,000	1 3 0	do.
	1893	4	2,107,000	1 3 0	do.
Queensland	1881	4	1,089,500	0 15 9	Debentures
	1890	3½	2,264,734	1 8 0	Inscribed.
	1891	3½	2,500,000	1 8 2	do.
	1893	3½	1,182,400	2 18 8	do.
	1895	3½	1,250,000	1 11 7	do.
	1896	3	1,500,000	.....	do.
South Australia	1883	4	1,438,500	0 9 0	Debentures.
	1889	3½	1,317,800	0 19 1	Inscribed.
	1892	3½	932,300	1 1 2	do.
	1893	3½	125,000	.....	do.
	1894	3½	475,600	.....	do.
	1894	3½	200,000	.....	do.
	1896	3	839,500	1 2 5	do.
	1897	3	500,000	1 0 11	do.
Western Australia	1891	4	250,000	1 3 6	do.
	1892	4	400,000	1 3 7	do.
	1894	4	540,000	1 5 6	do.
	1895	3½	750,000	1 3 7	do.
	1896	3	750,000	1 3 8	do.
	1897	3	1,000,000	1 3 7	do.
Tasmania	1886	4	1,000,000	0 18 0	Debentures.
	1889	3½	1,000,000	1 3 6	Inscribed.
	1893	3½	600,000	1 3 5	do.
	1894	4	1,000,000	1 3 8	do.
	1895	3½	750,000	1 4 5	do.
New Zealand	1895	3	1,500,000	2 2 8	do.

Against several loans the expenses have not been stated, as the information has not been computed by the colony interested. The high rate of expenses on the 1893 Queensland loan is accounted for partly by the fact that the amount was underwritten at the rate of 1 per cent.

Quotations of Stock.

In another chapter the growth of Australasian indebtedness on private account has been traced over a period of about twenty-seven years, and it has been shown that during that time nearly the whole of the advances made to the various State Governments, and over one hundred millions of private advances, have been obtained in Great Britain. This condition of dependence on external capital for the development of the country has on more than one occasion proved a great danger to Australasia, but never to the same extent as during the crisis of 1892–93, when the withdrawal of confidence on the part of the British investor caused widespread confusion in almost every department of industry, and intense financial unrest, from which some of the colonies have not yet recovered, although, as will be seen from the appended table, Australasian stocks are now quoted at satisfactory prices.

The quotations for Colonial stocks in the London markets at the close of June, 1892, 1893, 1894, and 1898 are given below, the price in every instance being "cum dividend." With one exception—India—the quotations are for loans raised on the security of the local revenues of the country borrowing; in the case of India there is an Imperial guarantee. This advantage has also been extended to some Canadian, Mauritius, and New Zealand loans, but these are not quoted in the following list. In passing, it may be mentioned that the guarantee of the British Government is certainly to the advantage of the dependencies to which it has been extended, as in addition to the additional security afforded, it carries the right of trustees in the United Kingdom to invest trust funds in the stock—a privilege not extended to Australasian securities in general:—

Country.	Class of Stock.	Selling Price, "cum dividend."			
		June, 1892.	June, 1893.	June, 1894.	June, 1898.
Australasia—					
New South Wales	3½ per cent. Inscribed	96⅞	93	98⅞	110
Victoria	3½ do do ...	97	88½	97½	106
Queensland	4 do do ...	103½	99	104	112
South Australia	4 do do ...	106	103	106½	112
Western Australia	4 do do ...	103½	104	108	118
Tasmania	4 do do ...	103	98⅓	103	111
New Zealand	4 do do ...	104½	104½	108⅞	116
Canada	3 do do ...	94½	96	97	104
Cape Colony	4 do do ...	106	108	112	115
Natal	4 do do ...	103	108	109	120
India	3 do Stocks	97¼	98½	99¼	107

In order to make the comparison between different stocks quite fair, other things than bare quotations on a given date—chiefly the accrued interest and the unexpired currency of the scrip—have to be considered. A uniform date for the payment of interest on loans has not been adopted, so that the amount of interest accrued at the above-quoted dates varies with each loan; while the date on which the loan is repayable is a factor not to be neglected in estimating the price of a stock. The return obtained by investors from the inscribed stock of each colony on the basis of previous quotations, allowing for interest accrued and redemption at par on maturity, is given below:—

Country.	Nominal rate of Interest.	Selling Price, "ex dividend."	Currency.	Effective annual Rate of Interest per £100 sterling.	
				If no allowance is made for redemption at par on maturity.	Rate if Stock is held till date of maturity.
	℔ cent.	£	Years.	£ s. d.	£ s d.
June, 1892.					
Australasia—					
New South Wales	3½	96·19	32	3 13 5	3 14 2¾
Victoria	3½	95·45	31	3 13 11¾	3 15 0
Queensland	4	101·72	32	3 19 5	3 19 1¼
South Australia	4	105·22	44	3 16 9½	3 16 4
Western Australia	4	101·72	42	3 19 5	3 19 3
Tasmania	4	101·22	16	3 19 10	3 19 0
New Zealand	4	104·05	37	3 17 8	3 17 1¼
Canada	3	93·17	46	3 4 10½	3 5 7½
Cape Colony	4	105·89	31	3 16 3¾	3 15 1½
Natal	4	102·55	34	3 18 9½	3 18 4½
India	3	96·69	56	3 2 6¼	3 2 9
June, 1893.					
Australasia—					
New South Wales	3½	92·33	31	3 16 5½	3 18 2¼
Victoria	3½	86·97	30	4 1 2¼	4 4 3¼
Queensland	4	97·25	31	4 3 1	4 3 7½
South Australia	4	102·23	43	3 19 0¼	3 18 10
Western Australia	4	102·25	41	3 19 0¼	3 18 9½
Tasmania	4	96·75	15	4 3 6	4 6 0¼
New Zealand	4	104·06	36	3 17 8	3 17 1
Canada	3	94·68	45	3 3 10	3 4 5½
Cape Colony	4	107·90	30	3 14 10½	3 13 2¼
Natal	4	107·56	33	3 15 1½	3 13 9¾
India	3	97·92	55	3 1 8¾	3 1 0¼

Country.	Nominal rate of Interest.	Selling Price, "ex dividend."	Currency.	Effective annual Rate of Interest per £100 sterling. If no allowance is made for redemption at par on maturity.	Effective annual Rate of Interest per £100 sterling. Rate if Stock is held till date of maturity.
	℔ cent.	£	Years.	£ s. d.	£ s. d.
June, 1894.					
Australasia—					
New South Wales	3½	98·21	30	3 11 10¾	3 12 4
Victoria	3½	95·92	29	3 13 7¼	3 14 8
Queensland	4	102·25	30	3 19 0¼	3 18 6½
South Australia	4	105·74	42	3 16 5	3 15 10½
Western Australia	4	106·25	40	3 16 0½	3 15 4¼
Tasmania	4	101·25	14	3 19 9½	3 18 9
New Zealand	4	108·45	35	3 14 6	3 13 2½
Canada	3	95·68	44	3 3 2¼	3 3 8
Cape Colony	4	111·91	29	3 12 2½	3 9 5
Natal	4	108·57	32	3 14 5	3 12 9¾
India	3	98·68	54	3 1 3	3 1 4¼
June, 1898.					
Australasia—					
New South Wales	3½	108·32	26	3 5 2¼	3 2 6
Victoria	3½	103·96	25	3 7 11	3 6 6½
Queensland	4	107·74	26	3 15 0	3 12 9¼
South Australia	4	109·72	38	3 13 8	3 12 5
Western Australia	4	114·74	36	3 10 5	3 8 3
Tasmania	4	105·74	10	3 16 5	3 8 6½
New Zealand	4	114·55	31	3 10 6¼	3 7 7
Canada	3	101·68	40	2 19 5¼	2 19 2¼
Cape Colony	4	113·89	25	3 10 11¼	3 6 7½
Natal	4	118·22	28	3 8 4	3 3 9½
India	3	105·92	50	2 17 1	2 16 6

The figures given in the last column of the table show the relative positions of the various stocks quoted. As will be seen, the credit of each division of Australasia was somewhat better in 1894 than in 1892, notwithstanding the financial panic which occurred between those dates. In 1893 there was naturally a heavy fall, as compared with the preceding year, in all Australasian securities except those of New Zealand and Western Australia. Victorian stock showed the largest fall—which was only to be expected in view of the fact that the panic originated in that colony, and Victorian finances generally were at a low ebb. The quotation for New Zealand stock at the middle of 1893 was the same as that of the preceding year, which seemed to point

to the conclusion that the London market did not consider the interests of New Zealand to be bound up with those of the colonies on the mainland. In 1895 a great improvement took place in the prices of stock of all the colonies, and the rise has since been well maintained. To illustrate the fluctuations in the prices of colonial securities, the rates obtained during 1892, 1893, 1894, and 1898 are given below in a simpler form than in the preceding table. During the same periods British consols were selling at 98¼, 97, 99, and 111½:—

Country.	1892.	1893.	1894.	1898.
Australasia—	£ s. d.	£ s. d.	£ s. d.	£ s. d.
New South Wales	3 14 2¾	3 18 2¼	3 12 4	3 2 6
Victoria	3 15 0	4 4 3¼	3 14 8	3 6 6½
Queensland	3 19 1¼	4 3 7½	3 18 6½	3 12 9¼
South Australia	3 16 4	3 18 10	3 15 10½	3 12 5
Western Australia	3 19 3	3 18 9½	3 15 4¼	3 8 3
Tasmania	3 19 0	4 6 0¼	3 18 9	3 8 6½
New Zealand	3 17 1¼	3 17 1	3 13 2½	3 7 7
Canada	3 5 7½	3 4 5½	3 3 8	2 19 2¼
Cape Colony	3 15 1½	3 13 2¼	3 9 5	3 6 7½
Natal	3 18 4½	3 13 9¾	3 12 9¾	3 3 9½
India	3 2 9	3 1 0¼	3 1 4¼	2 16 6

So far only the return yielded to the investor has been considered. The following table shows the average prices obtained by the Australasian Governments for some of their last issues, and the quotations for the same stocks in June, 1898, the latter prices being, of course, "ex dividend":—

Colony.	Date of Negotiation.	Rate per cent.	Amount of Issue.	Average price realised.	Quotation, ex-dividend, June, 1898.
			£	£	£
New South Wales	1895	3	4,000,000	95·14	108·42
Victoria	1893	4	2,107,000	96·00	106·24
Queensland	1897	3	1,500,000	95·61	96·68
South Australia	1896	3	839,500	95·34	100·68
Western Australia	1897	3	1,000,000	93·45	97·67
Tasmania	1895	3½	750,000	98·30	106·46
New Zealand	1895	3	1,500,000	93·73	98·42

Character of Stock Issued.

By far the larger part of Australasian loans is inscribed, and the outstanding issues under the debenture system are being converted into inscribed stock as quickly as circumstances permit. New Zealand was the first colony to introduce inscription in 1877, in which year was passed the Consolidated Stock Act, a measure made necessary by the

abolition of the Provincial Councils. Under this Act the liabilities of the various provinces were merged into the general debt of the colony; and under the same Act and its amendment of 1884 the Government has worked systematically to consolidate the debt by conversion and inscription, so that in March, 1897, the whole of the public liabilities were inscribed, with the exception of £4,814,892 represented by debentures. The Consolidated Stock Act of New Zealand was assented to in December, 1877; and in August of that year the Imperial Parliament passed the Colonial Stock Act, which provided for the inscription and transfer of Colonial stock raised in the United Kingdom. Certain steps were required to be taken before a colony could take advantage of the provisions of the Imperial Act. As already mentioned, New Zealand passed the necessary legislation at the end of 1877; but nothing was done by the other colonies until 1882, when Victoria and South Australia passed Inscribed Stock Acts; New South Wales and Queensland passed similar legislation in the following year, Western Australia in 1884, and Tasmania in 1889. It will thus be seen that a gradual change in the mode of floating loans for public purposes has been going on since 1877, and the time cannot be far distant when the whole debt of each colony will be represented by one class of stock. In 1879, or two years after passing the Consolidated Stock Act, New Zealand placed on the market a 5 per cent. loan of £5,000,000 at 97½ in the form of debentures, the subscribers having the option up to March, 1881, of exchanging for 4 per cent. inscribed stock, at the rate of £120 of stock for each £100 of debentures. The loan was successfully floated, and within the stated period £4,476,000 of the £5,000,000 debentures were exchanged for £5,371,200 inscribed stock at 4 per cent. The other colonies issued inscribed stock loans shortly after passing the respective Acts.

The Imperial "Colonial Stock Act, 1877," as previously mentioned, provides for the inscription and transfer of stock raised in the United Kingdom and for stamp duty to be levied thereon. It also defines the position of the British Government as regards Colonial indebtedness, and provides that every document connected with stock transactions shall have printed upon it a distinct intimation that no liability, direct or indirect, is incurred by the British Government in respect of such stock, unless the loan is under Imperial guarantee.

The difference between registered and inscribed stock is practically small. Transactions under the former head are confined to a few old funded stock loans. Debentures and inscribed stock form the principal classes of securities, and, as previously pointed out, the debenture form is rapidly giving way to inscription. Debenture coupons are, like ordinary scrip, negotiable by bearer, and are liable to the risk of forgery. By inscription the possibilities of fraud in transfer are minimised, as the stock is inscribed in the books of the bank, and transferable therein by the stock-holders personally or by their attorneys, without the issue of certificates of stock. In the case of registered stock, certificates are issued transferable by deed.

The practice of issuing treasury bills, either in anticipation of or to make good deficiencies in revenue, obtains in each colony, and, as previously explained, is an old-established custom; but treasury bills have been made to serve another purpose, and money has been raised by their sale to meet certain obligations for public works. This is an innovation which could not well be avoided in the disturbed markets of the last few years. The bills are in reality ordinary loans with short currencies, and carry a higher rate of interest than issues of the funded debt. The unsatisfactory state of Australasian finance does not allow of the absolute redemption of these bills; consequently they will either have to be renewed or converted into stock, an operation which will entail an additional expenditure to the charges of first negotiation. The New Zealand treasury bills are issued direct by the Treasury at par, and the expenses of negotiation are small. The bills are usually redeemed during the year of issue, and for this reason they have not been included with or considered as part of the public debt of New Zealand, though in the case of the other colonies treasury bills have been so included. Australasian treasury bills are like the British treasury bills in name only, but they have some points in common with the British exchequer bills.

Conversion and Consolidation of Loans.

Conversion and consolidation as applied to loans are not interchangeable terms, but represent two distinct transactions in so far related that without conversion consolidation would be impracticable. All the colonies are systematically converting their old loans into inscribed stock, and by so doing they are taking a step towards consolidation. Since the Consolidated Stock Act was passed in 1877, New Zealand has been engaged in converting its old loans into inscribed stock, and consolidating the whole debt by adopting three uniform interest rates of 4, 3½, and 3 per cent., and fixing the dates of maturity at 1929, 1940, and 1945 respectively. The transactions in conversion and consolidation in New Zealand from 1877 to 31st March, 1897, were as stated below. In addition to the amounts shown, old debentures to the amount of £5,716,000 were converted into short-dated debentures under the 1884 Consolidated Stock Act, pending subsequent conversion into inscribed stock :—

Amount of Old Debentures Converted or Redeemed.	Additional Capital added to Principal by Conversion or Consolidation.	New Stock Issued.		
		Nominal Rate of Interest.	Amount.	Date of Maturity.
£	£		£	
19,724,400	1,600,902	4 per cent.	21,325,302	1929
5,720,550	440,617	3½ ,,	6,161,167	1940
24,200	2,420	3 ,,	26,620	1945

The loading of the principal by conversion appears heavy; but New Zealand was saddled with a number of small loans, much after the type of municipal borrowings, which it was most desirable should be consolidated without delay, and some sacrifice was made to accomplish this; besides, the compensation obtained in a lower rate of interest must be set against the increased capital. The annual saving in interest on the amount converted to the 31st March, 1897, is stated as £167,332, viz., £102,114 on the 4 per cent., £65,049 on the 3½ per cent., and £169 on the 3 per cent. stock. The subject of the New Zealand conversion is a large one, and inquirers should consult the publications of the Government of that colony, which give details that would hardly be in place in a volume such as this.

In Victoria the 4 per cent. stock floated in Melbourne to the amount of £2,089,613 has been converted into 3 per cent. stock, with the exception of £120,062 still to be converted or redeemed. The saving in interest by the conversion is £18,298.

Late Issues of Loans and Treasury Bills.

As late as the year 1890 the colonies could borrow in London on very favourable terms, but in the year named the conditions were no longer satisfactory. This change had for its immediate cause a condition of things not of Australasia's own creation, the Baring failure and the Argentine crisis being primarily responsible for the stoppage of Australasian credit; but there is no reasonable ground for supposing that if the Baring failure had not taken place the London markets would have been much longer open to the Australasian colonies. The Treasurers of the various provinces were entirely unprepared for this revulsion in credit. They were committed to engagements for the construction of public works which they could not terminate; contracts had been entered into for large sums on the assumption that funds would be available; besides this, no preparations had been made to meet debentures falling due in a short time. The sudden stoppage of credit greatly embarrassed the Governments, and most of the colonies had recourse to treasury bills to enable them to adjust their finances to the altered circumstances. The amounts received from the sale of these bills were devoted to meeting loans maturing, and providing funds for public works already contracted for. Pressing necessities and the improved condition of the London market encouraged several of the colonies during 1893 and 1894 to place ordinary loan issues, which were successfully negotiated; and the proceeds of these loans relieved the liabilities on matured treasury bills and current obligations. In 1895 the credit of the Australasian colonies was fully re-established in London.

New South Wales.—In 1892 and 1893 the Treasury had authority to issue £3,000,000 of 4 per cent. funded stock at a minimum price of par. Up to the 30th June, 1897, £2,549,350 had been disposed of, the cost

of the issue being practically nil. In 1894 and in 1895 further issues of funded stock, amounting to £2,617,212, were authorised, and up to the 30th June, 1897, the amount sold was £1,804,725. The rate of interest on the stock is 3 per cent., and the date of maturity, 1912. The only expense attached to the issues was a small amount for brokerage. Provision has been made for sinking funds to liquidate certain portions of the loans expended on works of an unproductive character.

In October, 1893, an inscribed stock loan was floated in London, the rate of interest being 4 per cent., and the currency forty years. The minimum price was fixed at 98½, and the average price realised was £100 11s. 10½d. The rate paid by the Government, allowing for redemption at par on maturity, was £4 3s. 0¼d.; while the return to investors was £4 1s. 8½d.

During 1894 several small 5 per cent. loans matured, amounting in the aggregate to £832,000. In September of that year a 3½ per cent. covering loan was successfully issued, the average price realised on the gross proceeds being £101 15s., which is reduced to £99 13s. 6d. if allowance be made for accrued interest and charges. The rate paid by the Government is £3 10s. 11d. per cent., and the interest yielded to investors, £3 9s. 4¼d. The loan was subscribed over five-fold, the amount tendered being £4,268,000.

In October, 1895, an inscribed stock loan for £4,000,000 was floated, the rate of interest being 3 per cent., and the currency forty years. The minimum price was fixed at 94, and the gross proceeds averaged £96 18s. 3d. No further loans were placed on the London market until January, 1898, when a loan of £1,500,000, bearing interest at 3 per cent., with a minimum of 99, was successfully floated, the gross proceeds being £1,506,250.

In 1895 authority was given to issue treasury bills to the amount of £1,174,700 to cover the accumulated deficiencies in revenue on the 30th June of that year. The rate of interest allowed is 3 per cent., and a sum of £150,000 is set aside annually for the repayment of the debt.

Victoria.—An inscribed stock loan of £2,107,000 was floated in London in October, 1893, the rate of interest being 4 per cent., and the date of maturity between 1911 and 1926, at the option of the Government on due notice being given. Four per cent. debentures were also disposed of locally from March, 1893, to June, 1897, to the amount of £746,795.

During 1896 an Act was passed providing for the conversion of the 4 per cent. stocks on the Melbourne register into a 3 per cent. stock. The amount of 4 per cent. stock sold from January, 1895, to December, 1896, was £249,130, holders of which have availed themselves of the privilege of conversion. The amount of new 3 per cent. stock sold under the Conversion Act was £28,913.

No treasury bills were sold during 1893, and the amount of outstanding bills on the 30th June, 1894, was £750,000. Soon afterwards treasury bills for £250,000 were sold, making the amount outstanding on the 30th June, 1895, £1,000,000; while on the 30th June, 1896, the treasury bills redeemable amounted to £750,000.

In September, 1896, authority was given for the issue of £375,000 treasury bills for public works and services. The amount sold to the 30th June, 1897, was £100,000, bearing interest at 3¼ per cent., and repayable in four annual instalments of £25,000 each, the first payment being due on the 1st January, 1899. The total amount of treasury bills outstanding on the 30th June, 1897, was £600,000.

Queensland, in January, 1893, placed a 3½ per cent. loan of £1,182,400 on the London market, the average price obtained being £88 16s. 4d. The charges were heavier than usual, as the loan was underwritten at the rate of 1 per cent.

In June, 1895, another 3½ per cent. loan for £1,250,000, with a currency of fifty years, was placed on the market. The gross price obtained was £101 12s. 7d., and deducting accrued interest the Government received about £100 0s. 2d. In addition, stock to the amount of £750,000 was sold locally, the net proceeds being £743,750, or £99 3s. 4d. per £100.

In June, 1897, a 3 per cent. loan for £1,500,000, repayable in 1947, was floated in London, the average price realised being £97 1s. 5d. Local sales of 3 per cent. stock were also negotiated dnring the year, the total issued being £124,480, which was sold at the average price obtained in London.

Another class of stock was authorised in 1895, viz., Government Savings Bank Stock. The object of the establishment of this class of security was to enable depositors of over £200 to earn interest on such excess. The first issue was limited to £1,000,000, and up to the 30th June, 1897, the amount sold was £952,960, of which £952,610 is bearing interest at 3½ per cent., and £350 at 3 per cent.

During 1893 three issues of treasury bills were placed locally, viz., £222,500 in January, £5,000 in April, and £11,000 in December. The rate of interest is 4 per cent., and the dates of maturity are 1899, 1898, and 1903 respectively. In January, 1894, bills to the amount of £1,000 were also disposed of locally, the rate being the same as for the previous issues, and the date of redemption, 1903. Various small parcels have been sold up to June, 1897, the amount outstanding on that date being £71,000. The Trustees of the Public Debt Reduction Fund hold Government Savings Banks stock to meet the balance of the treasury bills as they become due, viz.:—£70,000 in October, 1898, and £1,000 in January, 1903. These represent the whole of the bills outstanding.

South Australia.—In 1893 a small loan of £125,000, being portion of the 1890 loan of £1,532,900, was floated in London. The rate of interest is 3½ per cent., and the loan is redeemable in 1939. An instalment

of the £1,013,279 loan of 1892 was placed in Adelaide in February, 1894. The amount of the issue was £200,000, the price realised per £100 being 92. The rate of interest is 3½ per cent. In June, 1895, a further issue of £311,000 was floated in Adelaide. In February, 1896, a loan of £839,500 was issued in London, bearing interest at 3 per cent., and redeemable in 1926. The net proceeds, after allowing for charges and accrued interest, amounted to £800,406, or £95 6s. 10d. per cent. A further loan of £500,000 was floated in London in May, 1897, also bearing 3 per cent. interest. From the latest available particulars, the average price realised per £100 was £95 10s. During 1896 local stocks bearing 3 per cent. were sold, the total issue being £606,800, and the net proceeds £98 2s. per £100. The two last-mentioned loans mature in 1916.

In June, 1892, treasury bills were issued to the amount of £349,225, with interest at the rate of £4 11s. 3d. per cent., and payable in five years; and in March and July, 1893, further issues of £250,000 each were made bearing the same rate, the dates of maturity being 1898 and 1900 respectively.

Western Australia.—In June, 1894, a loan of £540,000, at 4 per cent., was floated in London at a minimum of 102, the average price realised being £103 6s. 1d. In May, 1895, the colony floated a 3½ per cent. loan of £750,000, having a forty years' currency, but redeemable from 1915 on twelve months' notice being given. The minimum price was fixed at 99, and the average obtained was £103 1s. 5d., or, deducting accrued interest, £101 9s. 2d.

In May, 1896, Western Australia, following the example of New Zealand and New South Wales, placed on the market a 3 per cent. loan for £750,000, having a currency until 1935, but redeemable from 1915 on twelve months' notice being given. A sinking fund is to be established in connection with this loan, commencing three years after flotation, the contribution being 1 per cent. per annum. The gross price obtained was £100 16s. 8d., and the accrued interest amounted to about 7s. 6d., so that the Government obtained £100 9s. 2d. This is the cheapest loan yet floated by any of the Australasian colonies.

In May, 1897, a further issue of £1,000,000 was floated in London, the minimum price being fixed at 95, and the rate of interest 3 per cent. The loan is redeemable in 1935, and the net proceeds per £100, after allowing for charges and accrued interest, amounted to £93 8s. 11d.

The Government had authority to issue treasury bills during 1893, the total amount sold to the 30th June, 1897, being £665,085, of which £150,000 were negotiated in London, and the balance locally. The amount outstanding on the 30th June, 1897, was £492,320, of which £480,000 bears interest at 4 per cent., and the balance at 4½ per cent. The whole amount is repayable in 1898, and is due at Perth.

Tasmania, in March, 1893, issued a 3½-per cent. loan of £800,000, which was part of the £2,100,000 authorised in December, 1892. The

loan was only a partial success, £600,000 being taken up and the balance withdrawn. The average price realised per £100 was £92 2s. 2d. In 1894 a loan of £1,000,000 was negotiated in London, the rate of interest being 4 per cent., and the date of maturity between 1920 and 1940, at the option of the Government on 12 months' notice being given. The average amount realised per £100 was £101 4s. 3d. In February, 1895, a 3½ per cent. loan of £750,000 was floated, redeemable in 1940, or from 1920 on 12 months' notice being given. The price realised was £98 6s. 1d.

In 1895 authority was given for the issue of £250,000 "Local Inscribed Stock" to cover deficiencies in revenue, and in 1896 a further sum of £250,000 was authorised. The total amount outstanding on the 31st December, 1896, was £294,608, of which £242,100 is earning 3½ per cent., and £52,508, 3 per cent. The loans are repayable at various periods from 1897 to 1905.

During 1894, treasury bills to the amount of £96,900 were negotiated in the colony, viz., £40,500 at 4 per cent. and £56,400 at 4½ per cent., the bills having a currency until 1899 and 1900 respectively. The total amount of treasury bills floated was £215,000, and £175,000 were outstanding on 31st December, 1896. Of these, £97,470 are bearing interest at 4½ per cent., £34,430 at 4¼ per cent., and £43,100 at 4 per cent. The dates of redemption and amounts due are:—£30,000 in 1897, £45,000 in 1898, and £50,000 in each of the years 1899 and 1900.

New Zealand.—During the year 1894–5, £682,200 of old debentures were converted into inscribed stock of the amount of £720,559; in 1895–6 debentures to the amount of £1,247,020 were converted into £1,277,526 of inscribed stock; while in 1896–7 the debentures converted amounted to £722,250, the value of the stock being £727,216.

Under the amending Consolidation Act of 1884, short-dated debentures are issued pending the sale of inscribed stock under the Act of 1877. In May, 1895, New Zealand placed a loan for £1,500,000 on the market. With the exception of some New South Wales treasury bills, this was the first 3 per cent. loan floated by any of the Australasian colonies. The loan has a currency of fifty years, and the minimum price was fixed at 90. The average gross price obtained was £94 8s. 9d., so that, after deducting accrued interest, the Government obtained £93 14s. 6d.

The amount of treasury bills outstanding on the 31st March, 1896, was £735,000; the issue during the ensuing twelve months amounted to £1,525,000, while bills representing £1,530,000 were paid off, leaving the amount outstanding on the 31st March, 1897, at £730,000. As, however, allowance is made for these at the end of the financial year when carrying forward the balance of the Revenue Account, the liability is practically wiped out.

The particulars of the latest issues of the Funded Debts negotiated in London for which particulars are available are as follow :—

Colony.	Year of Issue.	Year of Maturity.	Nominal—		Net Proceeds, less charges and accrued Interest.		Effective annual Interest per £100 sterling, paid by Government.	
			Interest.	Amount of Loan.	Total.	Per cent.	Nominal Interest on net Proceeds.	Rate paid, allowing for redemption at par. on maturity.
			per cent.	£	£	£	£ s. d.	£ s. d.
New South Wales.....	1893	1933	4	2,500,000	2,440,549	97·62	4 2 9¼	4 3 0¼
,, ...	1894	1918	3½	832,000	829,551	99·70	3 10 10	3 10 11
,, ...	1895	1935	3	4,000,000	3,804,573	95·14	3 3 6¼	3 4 3½
Victoria.....	1892	1921–26	3½	2,000,000	1,810,666	90·53	3 18 0	3 19 8¾
,, ...	1893	1911–26	4	2,107,000	1,999,733	94·91	4 5 1½	4 6 0
Queensland	1893	1930	3½	1,182,400	1,014,162	85·77	4 2 4	4 4 4½
,, ...	1895	1945	3½	1,250,000	1,230,274	98·42	3 11 9	3 11 10½
,, ...	1896	1947	3	1,500,000	1,434,122	95·61	3 3 2¾	3 3 7½
South Australia	1890–4	1939	3½	1,532,900	1,417,457	92·47	3 16 4½	3 17 0
,, *.....	1892–4	1939	3½	513,200	497,052	96·85	3 12 11	3 13 2¼
,, ...	1896	1926	3	839,500	800,406	95·34	3 3 5	3 4 8½
,, ...	1897	1916	3	500,000	481,591	96·32	3 2 9	3 4 10¼
Western Australia....	1892	1911–31	4	400,000	393,211	98·30	4 2 2¼	4 2 4½
,, ...	1894	1911–31	4	540,000	544,964	100·92	4 0 0¾	4 0 0
,, ...	1895	1915–35	3½	750,000	760,934	101·46	3 9 7	3 9 5
,, ...	1896	1915–35	3	750,000	744,542	99·27	3 0 10¾	3 1 0
,, ...	1897	1915–35	3	1,000,000	934,465	93·45	3 4 8½	3 5 9¾
Tasmania	1893	1920–40	4	1,000,000	994,912	99·49	4 1 2½	4 1 3
,, ...	1895	1920–40	3½	750,000	737,308	98·31	3 11 10	3 12 0
New Zealand	1895	1945	3	1,500,000	....	..	.....	.....

* Part of the £1,013,279 loan.

The treasury bills outstanding on the 30th June, 1897, were floated to cover deficiencies in revenue, with the exception of £100,000 in Victoria, £500,000 in South Australia, and £492,320 in Western Australia. The expenses incurred in these issues were practically nil, as the bills were floated at par, and in some cases were sold at a premium. Particulars of the cost of treasury bills negotiated prior to 1896 will be found in previous editions of this work.

Expenditure from Loans.

In the foregoing pages the chief points dwelt upon have been the amount of the public indebtedness and the credit enjoyed by each colony as tested by the selling price of its loans. Before closing this chapter it would be well to consider for what purpose the debts were incurred. The services upon which the proceeds of the public loans were expended are various, but the bulk of the expenditure may be placed to the account of the construction of railways, water supply and sewerage, and electric telegraphs. In the early stages of Australasian borrowing the

expenditure was moderate, loans being difficult to raise and interest high; but latterly, as the conditions under which loans could be contracted became favourable, especially since 1881, few of the colonies have set any bounds to their requirements. It was a repetition of the old experience—the opportunity engendered the desire, and the open purses of the investors tempted the colonies to undue borrowing and lavish expenditure. What is termed a "vigorous public works policy" was the order of the day, and works were pressed forward which under other circumstances would not have been undertaken, or have been held back until the growth of population warranted their construction. The plethora of money has been harmful in many ways, the most apparent being the construction of not a few branch railways, in outlying and sparsely-settled districts, which do not pay even their working expenses. The consequence is that the interest on loan capital has to be met out of general revenue, and in some instances the present generation will pass away before this condition of affairs will be remedied. But when every allowance has been made for unwise or improvident expenditure, it will be found that by far the larger portion of the proceeds of loans has been well expended. In some instances it will be years, taking a most hopeful view of the situation, before many of the revenue-producing works will yield a sum sufficient to pay working expenses and interest; nevertheless, a practical consideration of the conditions which surround Australasian settlement will demonstrate that in some instances the construction of these works was justifiable, for apart from the consideration that they will ultimately be self-supporting, they have already materially assisted in developing the country's resources, and have largely enhanced the value of the public estate. Whether their cost in all cases should have been charged against the loans account is a different matter, seeing that the rents obtained from public lands, and proceeds of sales, invariably go into the ordinary revenue of the colonies.

The following statement gives, under a convenient classification, the loan expenditure of each colony during 1896–7 :—

Colony.	Year ended.	Amount spent on Works yielding direct Revenue.				Other Works and Services.	Total.
		Railways.	Water Supply and Sewerage.	Electric Telegraphs.	Total.		
		£	£	£	£	£	£
New South Wales ..	30 June, 1897	476,674	440,109	68,664	985,447	562,658	1,548,105
Victoria	30 June, 1897	208,154	19,104	.....	227,258	49,416	276,674
Queensland	30 June, 1897	709,462	7,857	25,037	742,356	405,985	1,148,341
South Australia ..	30 June, 1897	58,058	168,180	13,446	239,684	118,974	358,658
Western Australia..	30 June, 1897	2,226,795	16,994	.....	2,243,789	365,880	2,609,669
Tasmania	31 Dec., 1896	25,825	.....	1,175	27,000	54,801	81,801
New Zealand.....	31 Mar., 1897	207,231	10,508	36,791	254,530	835,060	1,089,590
Australasia		3,912,199	662,752	145,113	4,720,064	2,392,774	7,112,838

The expenditure of Australasia during 1896–7 from funds derived from the proceeds of loans was £7,112,838. Of this amount, the sum of £4,720,064 was spent on services directly revenue-producing, and the remainder was chiefly devoted to works of a substantial nature, such as the construction of roads and bridges, the improvement of harbours and rivers, and the erection of lighthouses, schools, and public buildings. The amount expended on fortifications and military works was relatively small.

In most of the colonies the expenditure from loans has been greatly reduced during the last few years. In some cases this may be attributed to a settled policy of retrenchment; but in others, the difficulty of raising a loan in London affords a more probable explanation. The expenditure, however, now shows a tendency to increase, the figures for the last financial year being largely in excess of the previous three years in the colonies of Queensland, Western Australia, and New Zealand. In those three provinces the increased expenditure was chiefly made on account of the railways; and, also, in the case of New Zealand and Queensland the amounts partly represented loans to local bodies. The expenditure of each province during the last five years is given in the following table:—

Colony.	1892-3.	1893-4.	1894-5.	1895-6.	1896-7.
	£	£	£	£	£
New South Wales	3,014,680	1,929,580	1,330,046	1,270,898	1,548,105
Victoria	988,580	761,200	214,713	218,796	276,674
Queensland	1,035,523	378,077	230,120	592,158	1,148,341
South Australia	547,382	586,384	502,160	533,157	358,658
Western Australia	342,632	654,562	606,502	650,708	2,609,669
Tasmania	561,660	174,027	109,202	113,278	81,801
New Zealand	472,952	406,016	760,287	412,330	1,089,590
Australasia	6,963,409	4,889,846	3,753,030	3,791,325	7,112,838

The total expenditure of the proceeds of loans from the commencement of borrowing to the year 1896–7 was £212,971,819. Of this sum, £156,670,782, or nearly three-fourths, was spent in the construction of railways, water supply and sewerage works, and electric telegraphs; and the balance was expended on works and services which, though classed as non-productive, for the most part assisted in the national development. The expenditure on defence and the payments made to meet deficiency in revenue are the exceptions to the rule which has governed the expenditure of the proceeds of loan issues. The expenditure to cover deficiency in revenue has not been large, and is looked upon as but a temporary charge on the loan funds; while the expenditure on defence has been extremely small in all the colonies except New South Wales and New Zealand. The following table shows the

total loan expenditure of each province up to the close of the last financial year :—

Colony.	Expenditure to—	Amount spent on works yielding direct Revenue.				Other Works and Services.	Total.
		Railways.	Water Supply and Sewerage.	Electric Telegraphs.	Total.		
		£	£	£	£	£	£
N. S. Wales	30 June, 1897	40,273,797	7,786,584	935,396	48,995,777	9,549,397	58,545,174
Victoria	30 June, 1897	35,689,134	8,052,285	.....	43,741,419	2,680,758	46,422,177
Queensland	30 June, 1897	19,477,988	311,827	853,992	20,643,807	9,263,477	29,907,284
South Australia..	30 June, 1897	12,789,342	3,994,654	889,315	17,673,311	4,667,977	22,341,288
W'ern Australia..	30 June, 1897	4,843,830	23,801	269,308	5,136,939	1,455,522	6,592,461
Tasmania	31 Dec., 1896	3,685,460	.....	117,986	3,803,446	3,780,279	7,583,725
New Zealand	31 Mar., 1897	15,306,573	598,159	771,351	16,676,083	24,903,627	41,579,710
Australasia		132,066,124	20,767,310	3,837,348	156,670,782	56,301,037	212,971,819

In the New Zealand returns old provincial debts contracted prior to 1876, amounting to £11,535,469, have been included under the head "Other works and services," as there is no available record of the services upon which the loans of the old Provisional Governments were expended, except where such was for the construction of railways. The figures given for New South Wales, South Australia, Western Australia, and Tasmania under the head of "Railways" include loan expenditure on State tramways, but, except in the case of the first-mentioned colony, the amount thus expended is unimportant, as this service in the other provinces is generally in the hands of municipal authorities or private companies.

In the preceding table a large sum has been placed under the head of "Other works and services"; in the following statement this amount has been subdivided and is shown under several heads. In regard to New Zealand, the sum under the heading of "Miscellaneous" also includes the provincial loans prior to 1876 ; but it is certain that a very large proportion of this miscellaneous expenditure was incurred for war purposes, the cost of suppressing the Maori risings between 1860 and 1870 being charged to loan votes :—

Colony.	Roads and Bridges, Harbours, &c.	Defence Works.	Immigration.	Miscellaneous.	Total.
	£	£	£	£	£
New South Wales.....	5,049,510	1,242,006	194,430	3,063,451	9,549,397
Victoria	733,154	98,299	.....	1,849,305	2,680,758
Queensland	2,910,796	224,494	2,776,136	3,352,051	9,263,477
South Australia.....	2,669,311	235,885	.....	1,762,781	4,667,977
Western Australia	941,840	.....	16,239	497,443	1,455,522
Tasmania.....	2,197,808	121,423	235,000	1,226,048	3,780,279
New Zealand	4,975,950	923,781	2,146,945	16,856,951	24,903,627
Australasia	19,478,369	2,845,888	5,368,750	28,608,030	56,301,037

In the case of New South Wales the sum of £705,200, which was spent on immigration before the inauguration of the Loan Account, is not included in the above table. If this amount were included, the loan expenditure on immigration by that colony would be £899,630.

The subjoined table shows the expenditure per inhabitant on the basis of the figures given in the table on the preceding page:—

Colony.	Amount spent on Works yielding direct Revenue.				Other Works and Services.	Total.
	Railways.	Water Supply and Sewerage.	Electric Telegraphs	Total.		
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
New South Wales	30 14 7	5 18 10	0 14 3	37 7 8	7 5 9	44 13 5
Victoria	30 7 2	6 17 0	.....	37 4 2	2 5 7	39 9 9
Queensland	40 14 3	0 13 0	1 15 8	43 2 11	19 7 3	62 10 2
South Australia	35 7 4	11 0 11	2 9 2	48 17 5	12 18 2	61 15 7
Western Australia	32 6 2	0 3 2	1 15 11	34 5 3	9 14 2	43 19 5
Tasmania	22 3 9	.....	0 14 2	22 17 11	22 15 2	45 13 1
New Zealand	21 6 7	0 16 8	1 1 6	23 4 9	34 14 0	57 18 9
Australasia	30 5 10	4 15 3	0 17 7	35 18 8	12 18 3	48 16 11

Expenditure by the Government and Local Bodies.

The question of Local Government is dealt with in another chapter. It is well, however, to give here a statement of the total amount which passes through the hands of the general and local governments. The sum can in no sense be taken as the cost of governing the various colonies; as will appear from page 384, this may be taken as £19,713,108.

The total sum expended by the general and local governments of Australasia during the year 1896–7 was over £41,000,000, or £9 10s. 11d. per head. Of this large sum, £30,412,245, or £7 0s. 11d. per inhabitant, was spent by the general governments from their revenues, and £7,112,838, or £1 13s. per inhabitant, from loans; the local expenditure—exclusive, of course, of a sum equal to the Government endowment—was £3,668,448, or 17s. per inhabitant.

The following table shows the general, loan, and local expenditure for each colony :—

Colony.	General Government.		Local Government.	Total.
	From Revenue.	From Loans.		
	£	£	£	£
New South Wales	9,140,350	1,548,105	799,398	11,487,853
Victoria	6,814,843	276,674	1,094,353	8,185,870
Queensland	3,604,264	1,148,341	309,655	5,062,260
South Australia	2,779,110	358,658	230,410	3,368,178
Western Australia	2,839,453	2,609,669	71,537	5,520,659
Tasmania	750,244	81,801	133,135	965,180
New Zealand	4,483,981	1,089,590	1,029,960	6,603,531
Australasia	30,412,245	7,112,838	3,668,448	41,193,531

The expenditure per inhabitant, under the same classification, will be found below. The average expenditure for New South Wales is to some extent misleading, as about 40 per cent. of the population live outside the boundaries of the municipalities :—

Colony.	General Government.						Local Government.			Total.		
	From Revenue.			From Loans.								
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
New South Wales	7	0	11	1	3	10	0	12	4	8	17	1
Victoria	5	16	0	0	4	8	0	18	8	6	19	4
Queensland	7	12	8	2	8	8	0	13	1	10	14	5
South Australia	7	14	4	0	19	11	0	12	8	9	6	11
Western Australia	20	11	8	18	18	4	0	10	4	40	0	4
Tasmania	4	11	10	0	10	0	0	16	4	5	18	2
New Zealand	6	6	8	1	10	9	1	9	1	9	6	6
Australasia	7	0	11	1	13	0	0	17	0	9	10	11

LOCAL GOVERNMENT.

Municipal Institutions.

PRIOR to 1840 no municipal institutions existed in Australasia. On the 31st October of that year municipal elections were held in Adelaide, which was the first Australian city to acquire the right of self-government. On the 20th July, 1842, an Act providing for the incorporation of Sydney was assented to, and on the 12th of August of the same year Melbourne was constituted a municipality. In the former case the town was raised to the dignity of a city; Melbourne, however, was proclaimed a town, and continued to be so styled until 1847, when letters patent were received according to it the privilege enjoyed by Sydney. In New Zealand an Act was passed in 1852, dividing the colony into six provinces, the local administration of which was vested in Provincial Councils. This system continued until 1876, when the provincial system was abolished, and the whole colony, except the area within the forty-one boroughs then existing, was subdivided into counties, each county having full control of its local affairs. In 1858 Hobart was incorporated; and in 1859 Brisbane and Perth were erected into municipalities. In Victoria a general system of local government came into force in 1874. Queensland adopted a general system in 1879; and South Australia, in 1887.

With the exception of Western Australia, where extensive development has only taken place during the last few years, New South Wales, of all the colonies, is the most backward in regard to local government. The privilege of self-government is on all sides recognised as a sound one, and various measures to secure its establishment have from time to time been placed before Parliament, but so far the Legislature has not succeeded in giving effect to the manifest wishes of the constituencies. As the figures given below show, a large area still remains under the control of the central government in other colonies than New South Wales, but for this ample justification exists in the largeness of the territory and the sparseness of the population residing in the unincorporated areas, and it may be said that in all the provinces except New South Wales local governing bodies have been established in all places where the population is sufficient to make the introduction of the

municipal system desirable. The Northern Territory is omitted from the table :—

Colony.	Incorporated Areas, divided into—	Area of Incorporated Districts.	Area still under control of Central Government.
		sq. miles.	sq. miles.
New South Wales...	Boroughs and Municipal Districts ...	2,761	307,939
Victoria	Cities, Towns, Boroughs, and Shires	87,342	542
Queensland	Boroughs, Shires, and Divisions.....	668,252	245
South Australia proper.	Corporations and District Councils	41,851	338,219
Western Australia...	Municipalities, Road Boards, and Health Boards.	*46	975,874
Tasmania	Municipalities, Town Boards, and Road Trusts.	*9,535	16,680
New Zealand	Boroughs and County Councils, Road Districts and Town Districts	104,050	421
Australasia		913,837	1,639,920

* Area of Municipalities.

In New South Wales, Victoria, South Australia, Western Australia, and Tasmania, the rates are assessed on the assumed annual value; in Queensland, on the capital value; and in New Zealand the property within counties and road districts is assessed on the capital value, while in boroughs and town districts both descriptions of assessment are adopted. The value of ratable property in each of the colonies will be found below :—

Colony.	Capital Value.	Annual Value.
	£	£
New South Wales	122,713,400	7,426,440
Victoria	168,427,700	10,393,000
Queensland	40,810,384	*2,766,000
South Australia	*38,642,000	2,463,564
Western Australia	*4,036,000	426,400
Tasmania	*27,906,000	1,343,941
New Zealand	123,242,441	*5,758,000
Australasia	525,777,925	30,577,345

* Approximate Estimate.

The annual value given for Tasmania is to a certain extent overstated, as the same property may be rated by more than one of the three local authorities—the Municipal Council, the Road Trust, and the Town Board. The New Zealand returns are similarly affected. In this

colony, and it is believed also in Western Australia, some of the various divisions overlap, but the error from this source can be but small. The capital value for boroughs and town districts in New Zealand is £41,436,847, and the annual value £2,486,211.

The capital and annual values of ratable property in Sydney and Melbourne since 1891 are given below. The figures show the depreciation in the value of real estate which has taken place during the past few years :—

Year.	Sydney and Suburbs.		Melbourne and Suburbs.	
	Annual Value.	Capital Value.	Annual Value.	Capital Value.
	£	£	£	£
1891	5,851,589	99,224,810	6,533,717	87,939,287
1892	6,013,697	106,891,100	6,815,315	92,358,629
1893	6,067,882	110,061,000	6,639,014	88,510,328
1894	5,686,197	108,951,000	5,847,079	78,916,730
1895	5,352,920	96,692,200	4,984,596	66,824,384
1896	5,141,990	91,427,100	4,299,515	60,962,705
1897	5,019,230	88,390,800	4,168,182	60,352,040

The annual value of assessed property in Sydney, even under the present reduced valuations, is higher than that of any city in Great Britain, London alone excepted ; while the annual value of Melbourne is only surpassed by London and, to a small extent, by Glasgow. The annual value of Glasgow, the second city of the United Kingdom, is £4,208,000, and of Liverpool, £3,775,045.

The revenue and expenditure of the local bodies in each colony are given below. In the receipts the amount of the Government endowment is specified, while in the expenditure the outlay on public works is similarly treated :—

Colony.	Receipts.			Expenditure.		
	Government.	Rates, &c.	Total.	Public Works.	Other.	Total.
	£	£	£	£	£	£
New South Wales..	80,320	763,792	844,112	540,425	339,293	879,718
Victoria	111,967	1,080,759	1,192,726	707,977	498,343	1,206,320
Queensland	74,723	308,352	383,075	248,099	136,279	384,378
South Australia....	97,378	228,755	326,133	190,231	137,557	327,788
Western Australia.	31,862	80,381	112,243	66,363	37,036	103,399
Tasmania	5,593	138,774	144,367	.....	.....	138,728
New Zealand.....	171,646	1,004,506	1,176,152	672,184	529,422	1,201,606
Australasia ..	573,489	3,605,319	4,178,808	.....	.....	4,241,937

The revenue of local bodies per head of population in incorporated districts, and per square mile of territory in incorporated area, is, as far as can be ascertained, as follows :—

Colony.	Receipts per Inhabitant.			Receipts per Square Mile of Incorporated Area.		
	Government.	Other Sources.	Total.	Government.	Other Sources.	Total.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
New South Wales..	0 2 1	1 0 2	1 2 3	29 1 10	276 12 9	305 14 7
Victoria	0 1 11	0 18 4	1 0 3	1 5 8	12 7 6	13 13 2
Queensland	0 3 2	0 13 3	0 16 5	0 2 3	0 9 3	0 11 6
South Australia ..	0 5 7	0 13 1	0 18 8	2 6 6	5 9 4	7 15 10
Western Australia..	0 7 2	0 18 2	1 5 4	692 13 1	1,747 8 3	2,440 1 4
Tasmania	0 1 1	1 6 5	1 7 6	0 11 9	14 11 1	15 2 10
New Zealand	0 4 11	1 8 5	1 13 4	1 13 0	9 13 1	11 6 1
Australasia ..	0 3 2	0 19 9	1 2 11	0 12 7	3 18 11	4 11 6

The large revenue per square mile obtained in New South Wales and Western Australia is due to the circumstance already explained, that the area incorporated is small compared with the total territory of the two colonies, and comprises for the most part only urban settlements.

The amount of outstanding municipal loans for each colony is shown below. The figures include the liabilities to the Government :—

Colony.	Outstanding Loans.
	£
New South Wales	2,650,910
Victoria	3,994,102
Queensland	604,740
South Australia	61,900
Western Australia	103,397
Tasmania	488,102
New Zealand	3,545,891
Australasia	11,449,042

Against the gross liabilities shown above sinking funds are established in most of the colonies. The amount to the credit of local bodies in New South Wales is £234,460; in Victoria, £503,909; in Western Australia, £16,278; in Tasmania, £38,295; and in New Zealand, £291,072. There is also a fund in Queensland, but the amount accumulated cannot be given.

Boards and Trusts in New South Wales.

In addition to the municipalities, there are bodies known as Boards or Trusts whose function it is to construct and supervise certain works which, generally speaking, have been established for the benefit of districts differing from, and in most cases larger than, the areas incorporated for ordinary municipal purposes. These bodies are usually composed of members representing respectively the central government, the municipalities affected by the works in question, and other persons directly interested in the particular undertakings; and as a rule they raise the funds necessary for carrying out the works they control, by means of rates on the assessed value of the properties benefited, just as is the case in regard to municipalities.

In New South Wales there are the Metropolitan Board of Water Supply and Sewerage, which commenced by taking charge of the water supply in 1888, and assumed control of the sewerage system in 1889, and the Hunter River District Board of Water Supply and Sewerage, formed in 1892. The Wollongong Harbour Trust, which was instituted in 1889, was the only one of the kind in the colony—the works connected with shipping, and the improvements to navigation, at Sydney, Newcastle, and other ports, having always been carried out at the expense and under the supervision of the central Government. This Trust, however, has been abolished, and its powers assumed by the Government. There is a Metropolitan Fire Brigades Board, on which the municipalities within the metropolitan area are represented, and towards the annual expense of which they contribute one-third, and thirty-two country boards have also been established under the Fire Brigades Act of 1884, three of which are, however, within the area administered by the Metropolitan Board, and contribute to its funds. There are Irrigation Trusts at Hay and Balranald. A similar trust at Wentworth has been taken over by the Government, and the dissolution of the Balranald trust is under consideration.

The Country Towns Water Supply and Sewerage Act of New South Wales was passed in 1880. Under the provisions of this measure municipalities outside the area under the control of the Metropolitan and Hunter District Water Supply and Sewerage Boards were entitled to construct, or to have constructed for them by the Government, works for water supply and sewerage, provided the construction of the same were approved by the Governor-in-Council, and the municipalities agreed to pay back the original cost of the works, with interest at the rate of 4 per cent. per annum. The Government were to pay the certified cost of the works, and the municipalities were to repay the Government by instalments extending over a period of sixty years. Under the operations of this Act seventeen water supply works have been carried out by the Government (exclusive of Richmond, now administered by

the Metropolitan Board of Water Supply and Sewerage), and three by municipal councils, while works in seven other places were in course of construction at the close of 1897. The amount advanced by the Government to local bodies under the Act to the end of 1892 was £370,549, and instalments to the amount of £85,886 were then overdue. It was found that the liability of some of the municipal councils was too heavy for their resources, and in 1894 an amending Act was passed distributing the payments over 100 years and reducing the interest to 3½ per cent. At the close of 1897 the total amount expended by Government, inclusive of interest, stood at £661,554, viz. : £464,044 for works completed under Government control ; £27,344 for works carried out under the supervision of municipal councils ; and £170,166 for works still in course of construction. Of the total amount of £491,388 due on account of completed works to the 31st December, 1897, £17,179 had been repaid, and £72,346 had been remitted by Government, leaving the debt at £401,863.

Boards and Trusts in Victoria.

In Victoria the port of Melbourne is under the control of a Harbour Trust, which was established as far back as 1877. A Tramway Trust, representing twelve of the metropolitan municipalities, has been formed under the provisions of an Act passed in 1883. This body was entrusted with power to construct tramways through the streets of the municipalities interested, the requisite funds being raised by loans on the security of the tramways and the revenues of the municipal bodies connected with the undertaking. The trustees had the option of either working the tramways themselves or leasing them to a private company. They adopted the latter alternative, and the tramways are being worked on a thirty-two years' lease, commencing from 1884. In 1891 the Melbourne and Metropolitan Board of Works was established for the purpose of constructing and supervising all works connected with water supply, sewerage and drainage in Melbourne and suburbs. The Government is not directly represented on this Board, although to the Metropolitan Board of Water Supply in Sydney three members are nominated by the State. The reason for this difference is that in New South Wales the Government constructed the works and is responsible for the debt incurred in doing so, while in Victoria the Board carries out the work of construction, in addition to the maintenance and management to which the operations of the Sydney Board are confined. Throughout Victoria there are Water Works Trusts and Irrigation and Water Supply Trusts. During 1896-7 there were sixty-one Water Works Trusts and twenty-nine Irrigation and Water Supply Trusts. The amount authorised to be advanced by the Government for the former service was £1,023,444, and for the latter £1,364,183, and the amounts outstanding in June,

1897, were £796,122 and £1,016,549 respectively. As in New South Wales, the municipal bodies are represented on the Fire Brigade Boards, and bear a proportionate share of the expenses.

The Government of Victoria, prior to the establishment of the Trusts for Water Works, Irrigation, and Water Supply, advanced money from the Public Loans Account to local bodies requiring assistance to construct these works. The amount advanced for the development of the services to June, 1897, was £388,793, which has to be repaid into a sinking fund, or by annual instalments. The amount so repaid is £69,412. The figures just given are exclusive of the advances to the city of Ballarat for the water supply works, as these are now under a special commission. The outstanding debt of the Ballarat Water Commission on the 30th June, 1897, was £281,439. Under a special Act the Government have power to advance funds to shires for the construction of tramways, and £60,811 had been so advanced up to June, 1897. The Government, under two different Acts, can also make advances to Shires for the purchase of rabbit-proof fencing. The amount so advanced to June, 1897, was £190,409, of which £58,435 was outstanding on that date.

Boards and Trusts in other Colonies.

In Queensland the water supply service forms part of the local government system; the works are proposed by the municipal bodies, but the Government constructs and supervises them, and when completed hands them over to the local authorities with their attendant liabilities. The latter form a debt to the State which is repaid in instalments.

In South Australia there are no Boards or Trusts of any importance beyond the municipal bodies already mentioned; extensive municipal powers exist, however, for the construction of important local works.

In Western Australia there are Road Boards, Local Boards of Health, and a Metropolitan Water Works Board.

In Tasmania seven Marine Boards, forming part of the local government system, have been established in different parts of the colony, and there are twelve Water Trusts in connection with municipal bodies. The rural police come under the local government system, the ratepayers who enjoy the benefits of police protection being obliged to bear the cost of administration. The control of the police is, however, under officers appointed by the central government.

In New Zealand there are, in addition to the ordinary forms of municipal government, River and Harbour Boards, which are established throughout the colony. The number of these at the end of 1896 was respectively thirty-one and twenty-six. There is also a Drainage Board at Christchurch, thirteen Land Drainage Boards, and Water Supply Boards at Waimakariri and Manukau.

Complete returns of the Boards and Trusts in each colony are not readily obtainable; the following table, however, gives important details in connection with some of these bodies:—

Board or Trust.	Receipts.			Expenditure.	Outstanding Loans.
	Government.	Other.	Total.		
New South Wales—	£	£	£	£	£
Metropolitan Board of Water Supply and Sewerage	...	265,587	265,587	292,738	5,781,857
*Hunter District Water Supply and Sewerage	...	22,518	22,518	23,984	428,025
Victoria—					
Melbourne Harbour Trust	...	124,409	124,409	145,316	2,000,000
Melbourne and Metropolitan Board of Works	...	167,096	167,096	227,623	5,443,222
Melbourne Tramways Trust	...	378,632	378,632	362,397	1,650,000
Fire Brigade Boards	16,164	21,738	37,902	38,610	130,000
Water Works Trusts	...	...	...	...	796,122
Irrigation and Water Supply Trusts	...	...	...	...	1,016,549
Ballarat Water Commission	...	...	...	...	281,439
Queensland—					
Water Works	20,305	88,133	108,438	108,861	777,393
Western Australia—					
Road Boards	35,491	4,111	39,602	44,668	.....
Boards of Health	8,614	12,269	20,883	19,404	.....
Metropolitan Water Works Board	130,000	14,216	144,216	145,939	350,000
Tasmania—					
Marine Boards	1,346	18,155	19,501	20,167	42,500
Light-houses	...	9,643	9,643	7,615	.....
Water Trusts	796	3,896	4,692	4,427	52,550
Road Trusts	3,270	16,832	20,102	19,414	1,500
Town Boards	1,323	5,647	6,970	6,551	7,000
New Zealand—					
River Boards	...	11,740	11,740	11,439	39,105
Harbour Boards	6,709	386,695	393,404	388,466	3,703,561
Drainage Boards	93	27,281	27,374	28,431	200,000
Water Supply Boards	...	1,821	1,821	6,774	15,200

* Water supply only.

The amounts shown in the foregoing table under Road Trusts and Town Boards in Tasmania are included in the second table on page 415. The outstanding loans for Tasmania are gross, sinking funds amounting to £4,517, £1,094, £295, and £947 respectively being established in connection with the debts of Marine Boards, Water Trusts, Road

Trusts, and Town Boards. In New Zealand, also, sinking funds amounting to £7,112, £228,499, and £23,461 respectively exist in connection with the liabilities of River, Harbour, and Drainage Boards.

The outstanding loans of the Boards and Trusts of New South Wales constitute part of the public debt. This is true also with regard to the amounts for Victoria, except the loans of the Tramway Trust and the Melbourne Harbour Trust, the Fire Brigades Boards, and part of the loans of the Melbourne and Metropolitan Board of Works, which are not guaranteed. The liabilities shown for Queensland and Western Australia also form part of the public debt of those colonies; but the amounts given for New Zealand are not advanced from the General Loan Account. In the foregoing table the advances made by the Governments to the borrowing bodies are included.

INDEBTEDNESS OF LOCAL BODIES.

The following table shows the total indebtedness of local bodies in each of the colonies for which returns are available. The figures include the liabilities to the Government. It must also be explained that the liabilities of Road Trusts and Town Boards in Tasmania have been included with municipalities :—

Colony.	Outstanding Loans.		
	Municipalities.	Boards, Trusts, &c.	Total for local purposes.
	£	£	£
New South Wales	2,650,910	6,209,882	8,860,792
Victoria	3,994,102	11,317,332	15,311,434
Queensland	604,740	777,393	1,382,133
South Australia	61,900	.....	61,900
Western Australia.....	103,397	350,000	453,397
Tasmania.....	488,102	95,050	583,152
New Zealand	3,545,891	3,957,866	7,503,757
Australasia...	11,449,042	22,707,523	34,156,565

For the amounts that have just been given the local bodies are responsible directly to their creditors in part, and the general governments hold themselves directly liable for the balance. In the following table is given a division of the indebtedness of local bodies into the sum due to the State and that due to the public. It may be mentioned

that the amount owing to the State is included with the general debt of the colonies; and in order to estimate the total State and municipal indebtedness the figures in the second column only have to be added to those on page 388 :—

Colony.	Amount of Corporation Indebtedness included in the Public Debt.	Loans of Local Bodies floated in open market.	Total Local Indebtedness.
	£	£	£
New South Wales	6,209,882	2,650,910	8,860,792
Victoria	4,453,267	10,858,167	15,311,434
Queensland	1,157,133	225,000	1,382,133
South Australia	.....	61,900	61,900
Western Australia	350,000	103,397	453,397
Tasmania	100,800	482,352	583,152
New Zealand	710,359	6,793,398	7,503,757
Australasia	12,981,441	21,175,124	34,156,565

PRIVATE FINANCE.

THE first century of Australasian history closed on the 26th January, 1888. It is impossible to trace step by step the progress made during that period, as the data for the purpose are for the most part wanting. Sufficient material is, however, available, from which a comparative statement of the wealth of the colonies at different periods may be deduced. In the following figures the private wealth of the people has alone been considered, the value of the unsold lands of the State, as well as the value of public works, having been omitted. The table shows the private wealth of the whole of Australasia and the increase thereof at intervals of twenty-five years from the date when this territory was first colonised :—

January.	Private Wealth.	Increase during 25 years.
	£	£
1788	—	Country first colonised.
1813	1,000,000	1,000,000
1838	26,000,000	25,000,000
1863	181,000,000	155,000,000
1890	1,169,000,000	*988,000,000

* Increase for twenty-seven years.

The progress exhibited in this table is marvellous, and as regards ratio quite unprecedented. Though Australasia has but the population of a province of one of the great European powers, in the wealth and earnings of its people it stood, in the year 1890, before most of the secondary States, and as regards wealth and income per head of population far before any other country. The plan adopted in valuing the elements of private wealth has been sketched in previous issues of this work, and, as it is marked by no features of special interest, it need not be repeated

on this occasion. Below will be found the valuation of each of the principal elements :—

Classification.	£
Land, Houses, and Permanent Improvements	821,280,000
Live Stock	120,205,000
Coin and Bullion	33,582,000
Merchandise	51,151,000
Household Furniture and Personal Property	62,874,000
Shipping owned in Colonies	7,049,000
Mines and Mining Plant	38,033,000
Plant employed in Agricultural, Manufacturing, and other industries not elsewhere included	35,260,000
Total	1,169,434,000

Let it be understood that the figures just given refer to the year 1890. No attempt has been made to bring the estimates of private wealth down to a later date, but it cannot be denied that the upheaval caused by the financial crisis of 1893 has wrought very material changes in the value of most descriptions of property in all the colonies. The depreciation in the value of real estate may be gathered from the fact that between the beginning of 1893 and the end of 1896 the annual ratable value of Melbourne and suburbs declined from £6,639,014 to £4,168,182, while during the same period the annual value of Sydney and suburbs fell from £6,067,882 to £5,019,230. The conditions of productive industry, however, are still hopeful, and there is nothing to warrant a gloomy outlook for the future. True, it is not likely that certain forms of investment, notably land, will reach their former speculative values, at least for many years, and it is not desirable that they should do so ; but there is sufficient evidence that, with the expansion of population, there will still be ample scope for the remunerative employment of capital.

The Diffusion of Wealth.

In former issues of this volume the probate returns of each colony were made the basis of a calculation of its private wealth. Extended investigation showed that unless the ages of the persons dying were also taken into consideration, estimates based on the probate returns were likely to prove fallacious ; and as information in regard to ages was not procurable, this form of estimating was abandoned. The occurrence at irregular intervals of the death of very rich persons, even if the ages

had been procurable, would have had a disturbing effect on the calculations, as it can be readily imagined that, where the average number of deaths ranges from only one thousand in Western Australia to sixteen thousand in Victoria, an exceptionally large estate might easily vitiate the average. In support of what is here stated, it may be pointed out that, as estimated by probates, the average wealth per inhabitant in Victoria during five years ranged from £325 to £610, and in New South Wales from £300 to £530. That such was actually the case involves a supposition too ridiculous to be for a moment entertained. The probate returns, however, have some statistical value, as will presently appear, and the returns for the year 1896 are, therefore, given below :—

Colony.	Number of Estates.	Total Value of Estates.	Average Value of Estate left by each Deceased Person leaving Property.
		£	£
New South Wales	2,488	6,694,916	2,691
Victoria	3,335	6,091,421	1,827
Queensland	562	1,383,758	2,462
South Australia	811	1,161,457	1,432
Western Australia	211	290,509	1,377
Tasmania	216	204,845	948
New Zealand	855	2,166,356	2,534
Australasia	8,478	17,993,262	2,122

As already pointed out, the value of estates is liable to vary greatly from year to year. For the past seventeen years the average value of property left by persons who have died and left property was :—For New South Wales, £2,649 ; Victoria, £2,469 ; Queensland, £1,688 ; South Australia, £1,420 ; and Tasmania, £1,226. For New Zealand, returns are only available for ten years, and they show an average of £2,357 ; while the values have only been ascertained in the case of Western Australia for the year 1896, when they amounted to £1,377.

Although the probate returns have little value as indicating the total wealth of the community, in the absence of the exact figures which property returns disclose they form the only means of estimating the diffusion of wealth. The following table shows the proportion of persons

out of every 100 dying who left estates sufficiently large to be the objects of specific bequest. The figures cover seventeen years :—

Colony.	Proportion of Estates per 100 deaths of total population.			
	1880-84.	1885-89.	1890-94.	1895-96.
	per cent.	per cent.	per cent.	per cent.
New South Wales.....	11·0	11·6	13·2	15·1
Victoria	12·7	13·1	17·3	20·7
Queensland	6·6	8·8	10·2	10·2
South Australia.....	12·3	15·3	17·4	20·0
Western Australia ...	10·8	10·7	12·0	12·0
Tasmania	9·6	11·5	11·9	10·7
New Zealand.....	.....	.....	9·4	12·2
Australasia.....	*11·1	*12·0	14·0	16·0

* Exclusive of New Zealand.

These figures show a distribution of wealth not to be paralleled in any other part of the world ; and in a country where so much is said about the poor growing poorer and the rich richer, it is pleasing to find one out of every four adult males and females the possessor of property. Taking the last two years, in Victoria is found the widest diffusion of the individual colonies ; South Australia comes next to Victoria ; then come New South Wales, New Zealand, Western Australia, and Tasmania ; and lastly Queensland. Too much stress may be laid on the apparently wider distribution of wealth in one colony than in another, for it is obvious that a province with a stationary or decreasing population will naturally come out of a comparison of this kind more favourably than another with a rapidly-increasing population. Taking all things into consideration, the table as a whole is highly satisfactory, and should be additionally pleasing from the circumstance that the ratio of distribution has been increasing fairly regularly in every province of the group.

In the United Kingdom, during the five years 1890-94, the last period for which complete returns can be obtained, the number of estates on which legacy duty was paid was 257,351. Making the liberal allowance of one-fourth for successions, of which the number is not given in the *Statistical Abstract*, the total estates would be 321,700, as compared with 3,595,447 deaths, or a little over 8·9 per cent., as against 14·0 per cent. in Australasia during the same period. To show still more clearly the wide distribution of property in these colonies, the following statement is even more useful than the figures just given. The comparison is made as for every hundred deaths of adult males, and for the same number of deaths of adult males and

females. This latter method is undoubtedly the proper basis of comparison, as large numbers of females are possessors of a substantial amount of property :—

Colony.	Proportion of Estates per 100 deaths of adult males.				Proportion of Estates per 100 deaths of adult males and females.			
	1880-84.	1885-89.	1890-94.	1895-96.	1880-84.	1885-89.	1890-94.	1895-96.
	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.
New South Wales	34·6	37·5	41·2	44·3	22·3	23·8	25·8	27·5
Victoria	38·8	39·7	49·8	55·8	23·4	24·2	30·2	32·7
Queensland	18·3	23·1	28·6	27·1	13·8	16·9	20·2	18·8
South Australia	50·0	53·5	59·4	62·9	29·1	30·9	32·3	34·0
Western Australia	29·5	29·3	31·2	26·2	19·8	19·6	21·1	19·2
Tasmania	26·0	31·6	33·2	28·0	15·8	19·4	20·1	16·8
New Zealand	...	...	27·3	33·1	.....	.....	16·7	20·3
Australasia	*34·6	*37·0	41·6	44·4	*22·0	*23·4	25·8	27·2

* Exclusive of New Zealand.

Importation of Capital.

Australasia ranks among the debtor nations. At the close of 1897 its people owed to persons outside its boundaries, or, more correctly speaking, there was invested in it by non-residents, and owing by its various Governments, a sum approximating to £367,168,000, or £81 per inhabitant. Of this large sum, £146,894,000 represents the private investments, and £220,274,000 the outstanding liabilities of the States and local governing bodies. More important in some respects than the corpus of the debt are the annual payments made in respect thereof. These can be stated with some exactitude. The yearly interest paid on account of State and local government debts to other than Australasian creditors amounts to £8,336,000, while the income from private investments may be stated at £5,813,000 ; in all, £14,149,000. The return on private investments represents an annual interest of about 4 per cent. When it is remembered that the bulk of the shares of the large dividend-paying mines of New South Wales, as well as of many of the Queensland mines, are held in London, and yield to the owners a return which falls little short of £900,000, and that there are very many investments in all the colonies which yield a much higher return than 4 per cent., it will be evident that a considerable sum, variously estimated up to seventeen millions sterling, has been sunk in unproductive investments.

It has been stated above that the gross amount of investments by non-residents is £367,168,000. This sum may be divided into what was received prior to 1871, and what was received subsequent to that date, for 1871 may be conveniently taken as the opening year of latter-day Australasian finance. At the opening of 1871 these colonies stood indebted to Great Britain thus :—

	£
On account of State and municipal borrowings	34,362,000
Private investments	38,594,000
Total.....	72,956,000

From 1871 to 1897 the increase of indebtedness was :—

	£
On account of State and municipal borrowings	185,912,000
Private investments	108,300,000
Total.....	294,212,000

The figures just given are irrespective of the money brought to the colonies by persons taking up their abode therein ; the amount of such money is very considerable, as will presently appear.

The interests of the various colonies are so intertwined that there is not a little difficulty in accurately determining the amount of capital imported on private account in which each colony stands indebted to Great Britain, but an approximation has been made, which is given in the next table :—

Colony.	Owing by State and Local Government Bodies.	On Private Account.	Total Sum owing.
	£	£	£
New South Wales	57,382,000	29,873,000	87,255,000
Victoria	50,846,000	67,298,000	118,144,000
Queensland	30,374,000	10,490,000	40,864,000
South Australia	21,730,000	12,586,000	34,316,000
Western Australia	5,739,000	7,167,000	12,906,000
Tasmania	7,953,000	2,180,000	10,133,000
New Zealand	46,250,000	17,300,000	63,550,000
Australasia	220,274,000	146,894,000	367,168,000

The totals given in the last column are in one respect imperfect. Each colony has money invested in one or other of the neighbouring provinces, but in only two instances does the amount invested exceed what is owing. The exceptions are Victoria and South Australia, and the other five colonies stand indebted to them to the extent of £27,600,000

and £12,713,000 respectively. Making this correction in the figures of the various colonies, the following results are obtained :—

Colony.	Apparent Indebtedness.	Owing to each Colony in excess of amount due to other Colonies.	Owing by each Colony in excess of amount due by other Colonies.	Net Indebtedness.
	£	£	£	£
New South Wales	87,255,000	..	19,400,000	106,655,000
Victoria	118,144,000	27,600,000	..	90,544,000
Queensland	40,864,000	..	10,160,000	51,024,000
South Australia	34,316,000	12,713,000	..	21,603,000
Western Australia	12,906,000	..	2,772,000	15,678,000
Tasmania	10,133,000	..	1,776,000	11,909,000
New Zealand	63,550,000	..	6,205,000	69,755,000
Australasia	367,168,000	40,313,000	40,313,000	367,168,000

Until recent years Melbourne was the centre of Australasian finance, and even at the present time it is the head-quarters of most of the British banks and mortgage institutions doing business in these colonies. It is to this circumstance that the colony of Victoria appears, in the former of the tables just given, to be so heavily indebted to British investors—a condition which, as the latter table shows, is much ameliorated by the indebtedness of the other colonies to it. South Australia stands in a peculiar position, as to all appearances the private indebtedness of the colony to British investors is almost if not entirely balanced by its investments in the other provinces. The net indebtedness on private account is approximately as follows :—

New South Wales	£49,273,000
Victoria	39,698,000
Queensland	20,650,000
Western Australia	9,939,000
Tasmania	3,956,000
New Zealand	23,505,000

As already explained, the investments of South Australia in New South Wales, Queensland, and Western Australia practically cancel its indebtedness on private account to Great Britain.

In considering the question of the annual payment made by Australasia to Great Britain—which is its sole creditor—it is important to have distinctly in view the fact that part of this income is payable irrespective of production, and part only arises when there has been antecedent production. In the first of these categories is the charge on State and municipal borrowings to the amount already stated (£8,336,000), and probably half the income from private investments, or, in round figures, £2,900,000—the two taken together making a sum of £11,236,000, or £2 10s. 11d. per inhabitant, which must be

exported entirely irrespective of the condition of productive industry. It may here be remarked that there is another source of drainage from these colonies to be considered in estimating the tributary stream flowing from Australasia to England—that is, the income of absentee colonists, which for 1897 probably reached £810,000. The total payments to outside creditors or investors during 1897 may be summarised as follow :—

	£
Payments on account of State or municipal borrowings, and on account of private investments on which interest must be paid irrespective of the condition of production	11,236,000
Return dependent on antecedent production	2,914,000
Absentee incomes (usually so called)	810,000
Total	14,960,000

In the following table the amounts to be remitted on account of the State and on private account are shown separately for each colony :—

Colony.	Interest on State and Local Loans.	Excess of Earnings of non-residents over income derived by residents of the colony from abroad.	Total.
	£	£	£
New South Wales	2,099,000	2,471,000	4,570,000
Victoria	2,012,000	900,000	2,912,000
Queensland	1,046,000	1,603,000	2,649,000
South Australia	883,000	*121,000	762,000
Western Australia	158,000	390,000	548,000
Tasmania	312,000	203,000	515,000
New Zealand	1,826,000	1,178,000	3,004,000
Australasia	8,336,000	6,624,000	14,960,000

* Excess of incomes of residents from abroad.

From the figures just given it will be gathered that for the colonies to pay their way there ought to be an excess of exports over imports equal to the interest on loans outstanding and the earnings of investments—that is to say, if no capital were introduced and none withdrawn. But equilibrium in this respect is not to be looked for. Even in these times there is a stream of capital coming to the colonies in excess of what is withdrawn ; and even in the worst years several thousand persons arrive in Australasia with the intention of settling there, and a large proportion of these persons bring with them some little capital with which to begin their career in their new home. In the foregoing pages the expression "capital introduced" must be taken in a qualified sense. Under the condition of equilibrium between the introduction and withdrawal of capital, as already demonstrated, Australasia

would show an excess of exports representing the interest on State and other public loans and the tribute due to private investors. This export for 1897 was about £14,960,000, and it is therefore plain that Australasia might increase its indebtedness to the extent of about fifteen millions in any one year and at the same time show an equality between its imports and exports. With this explanation in mind it will not be difficult to understand how, in spite of the fact that during the last twenty-seven years the indebtedness of Australasia was increased by £294,212,000, the money or money's worth actually received was only £10,377,000. Such is the operation of interest as affecting a debtor country. In further explanation of this view of the matter the following figures are given ; they refer to the borrowings of the Governments and local bodies during the twenty-seven years 1871–97 :—

Colony.	Borrowings of State and Local Government Bodies.	Interest on State and Local Government Loans.	Net Amount of Money introduced.
	£	£	£
New South Wales	48,185,000	33,240,000	14,945,000
Victoria	39,517,000	35,606,000	3,911,000
Queensland	27,040,000	19,110,000	7,930,000
South Australia	19,883,000	14,820,000	5,063,000
Western Australia	5,739,000	1,368,000	4,371,000
Tasmania	6,748,000	4,575,000	2,173,000
New Zealand	38,800,000	38,733,000	67,000
Australasia	185,912,000	147,452,000	38,460,000

It will be seen that out of loans aggregating £185,912,000 a sum of only £38,460,000 reached Australasia, the balance of £147,452,000 being retained in London to meet interest charges, as a set-off against a similar sum which otherwise it would have been necessary to remit from Australasia. The figures in regard to private borrowings are still more striking :—

	£
Private borrowings in excess of withdrawals	108,300,000
Capital introduced by persons taking up their abode in the colonies	24,944,000
Total inflow of capital	£133,244,000
Earnings of investments of non-residents and incomes of absentees in excess of income derived by residents in the colonies from investments abroad	136,383,000
Excess of outflow over inflow	£3,139,000

It will be seen that, leaving out of consideration the capital introduced by immigrants, the return to investors, together with absentee incomes, has exceeded by over twenty-eight millions the amount invested in Australasia, although the principal sum (£108,300,000) still remains due.

It may be difficult to conceive how such a result has been possible, but the difficulty will be lessened when it is remembered that at the beginning of the period embraced in the tables the Australasian colonies were already paying an annual tribute to private investors of £3,517,000, and, therefore, on account of debts incurred and investments made prior to 1871 something like 95 millions might have been paid away during the last twenty-seven years without any reduction in the principal owing.

The movement of capital towards Australasia up to the end of 1870 presented no features of unusual importance, for the total sum received, though large, representing as it did rather more than £38 per inhabitant, was not larger than might reasonably have been expected to be introduced into a country so rapidly adding to its population and so fertile in resources. During this period the investments on private account and by the various Governments were almost equal in amount, but in the twenty-five years that followed the borrowing operations of the Governments far outstripped private investments. The following table shows the borrowings of the State and on private account prior to 1871, and in five-year periods subsequent to that date :—

Period.	Money raised by Government or Local Bodies.	Private Investments, excluding Immigrants' Capital.	Total.
	£	£	£
Prior to 1870	34,362,000	38,594,000	72,956,000
1871–75	20,999,000	*2,392,000	18,607,000
1876–80	32,804,000	11,407,000	44,211,000
1881–85	46,944,000	37,186,000	84,130,000
1886–90	53,374,000	49,077,000	102,451,000
1891–95	28,653,000	*1,322,000	27,331,000
1896–97	3,138,000	14,344,000	17,482,000
Total ...£	220,274,000	146,894,000	367,168,000

* Excess of withdrawals over investments.

In the foregoing table the importation of capital by immigrants has been neglected ; if this be taken into consideration, the figures given in the next table show the full amount for the period subsequent to 1870 :—

Period.	Total Capital Introduced.
	£
1871–75	23,010,000
1876–80	48,959,000
1881–85	90,504,000
1886–90	107,088,000
1891–95	30,705,000
1896–97	18,890,000
Total	£319,156,000

The total indebtedness of Australasia to British investors has been set down in the foregoing pages as £367,168,000, and the annual return therefrom, excluding absentee incomes, £14,150,000. The weight of indebtedness per head for each colony, both as regards capital and annual return, is as appended. Allowance has been made in the total of each colony for intercolonial investments. The figures are for the year 1897 :—

Colony.	Total Indebtedness per head, including Private Investments.	Annual Return per head.
	£ s. d.	£ s. d.
New South Wales	80 11 9	3 9 1
Victoria	76 19 6	2 9 6
Queensland	105 5 5	5 9 4
South Australia	59 10 1	2 2 0
Western Australia.....	96 16 6	3 7 8
Tasmania	69 7 0	3 0 0
New Zealand	95 13 7	4 2 5
Australasia	83 5 1	3 7 10

From the table given on the preceding page, showing the total amount of money, including that brought to the country by immigrants, introduced during each quinquennial period since 1870, it will be seen that the net introduction of capital during the first period was £23,010,000, and of this New Zealand received £10,707,000, or nearly one-half, principally the proceeds of Governmental borrowings, the withdrawals of private capital being nearly as large as the amount introduced. Queensland and New South Wales had, during the period, an accession of capital to the extent of £4,329,000 and £4,321,000 respectively; in the one case the sum obtained by the State was £2,389,000, and by the public, £1,940,000, while in the other case the sum introduced by the State was £2,861,000, and by private persons something less than £1,500,000. The net sum introduced into Victoria was £2,982,000, the State having imported £3,352,000, while the export of private capital was some £370,000. Tasmania received in all £1,210,000, of which £220,000 was introduced by the State, and nearly one million

by private persons, which must be reckoned a very considerable sum in view of the smallness of the population of the island. Nearly the whole sum introduced into Western Australia (£400,000) was by the Government. South Australia, even so far back as 1871–75, was in a very different position to the other colonies in regard to private investments. During the five years the State introduced £1,722,000, but £2,661,000 was withdrawn by lenders or sent out of the colony for investment. Speaking generally, the period 1871 to 1875 was marked by large public borrowing, with a very moderate influx of private capital. During the period the importation by the various Governments amounted to £2 per inhabitant yearly, the private investments being not more than 4s. per inhabitant.

The period from 1876 to 1880 showed a net importation of capital to the amount of £48,959,000, or more than twice the sum received during the preceding five years. Of the sum named, New Zealand received £15,396,000, or slightly less than one-third, although its population was only one-eighth of the whole of Australasia. The larger portion of the money brought to New Zealand was in the shape of Government loans, which amounted to £10,884,000, the net sum received on account of private investment being £4,512,000. New South Wales stood next as regards the amount of capital received, but the borrowing by the State and local bodies only amounted to £5,458,000, or half the sum raised by New Zealand, while the private investments amounted to about £8,170,000, of which nearly two millions were received with immigrants taking up their permanent abode in the colony. The total capital imported into New South Wales during the five years was £13,626,000. Queensland received £8,028,000 during the period—an enormous sum, considering that the population was not more than 150,000. The money imported by the Government of that colony was £4,980,000, and that invested by private persons, £3,048,000. The Victorian Government imported £5,229,000, while the sum sent to the colony by private investors, over and above the amount withdrawn, was £1,949,000. The South Australian Government borrowed largely during the five years, the sum raised being £5,217,000, but, as in the previous period, the sum withdrawn by investors or sent to other colonies for investment exceeded the capital introduced by £1,644,000. Both Tasmania and Western Australia received less capital from abroad from 1876 to 1880 than in the previous five years, the amounts being £954,000 and £204,000 respectively. The Government borrowings were £671,000 in the one case and £365,000 in the other; but in Tasmania there was an investment of £283,000 by private persons, and a withdrawal of £161,000 in the case of Western Australia. Taking Australasia as a whole, the public borrowings during 1876–80 were large, amounting to £32,804,000, or a yearly sum of about £2 12s. per inhabitant. The import of private money continued on a more extended scale, the sum received in excess of withdrawals being £16,155,000, but nearly five millions of this sum were brought in by immigrants.

The facility with which New Zealand had been able to raise money on loan during the five years 1876–80 was an object lesson not lost on the other colonies, for during the five years from 1881 to 1885 the sum of £46,944,000 was raised by the various Governments and local bodies; while private investors, banks, and financial institutions poured in money at an almost equal rate, the net sum received on private account being, in round figures, £43,560,000. These sums represent yearly amounts of £3 2s. 4d. and £2 18s. 1d., or together over £6 per inhabitant—a rate of increase in indebtedness quite unparalleled in any country except in the next succeeding five years of Australasian history. Of the large sum of £90,504,000 received by these colonies, the share of New South Wales was £30,473,000. In the light of this statement it is easy to understand how, during this same period, though one of drought and restricted production, the industrial life of the colony was marked by increasing wages, shorter hours, and full employment. The importation by the State amounted to £16,066,000, and by private investors to £14,407,000, but of the sum last quoted £2,719,000 represented the money brought by immigrants and entailed no burthen on the colony for future interest to be exported. This period was, so far as New South Wales is concerned, the one marked by the most lavish borrowing by the State, though it yields to the subsequent quinquennium in regard to the importation of private capital. Queensland was the colony next to New South Wales in receipt of most money during the period under review, the Government of that colony having obtained £7,094,000, while private investments amounted to £12,506,000—enormous sums for a population of a quarter of a million. Included in the private investments, however, is the sum of £1,927,000 introduced by immigrants taking up their abode permanently in the colony. The imports of capital into New Zealand during the quinquennium were still very heavy, amounting to £7,442,000 by the State and £10,475,000 on private account, or £17,917,000 in all. Of the private importation, £587,000 accompanied the owners who settled in the colony. The capital received by Victoria, which in the two preceding periods amounted to very moderate sums, now rose to £13,002,000, viz., £8,519,000 on account of the Government, and £4,483,000 by private investors. The South Australian Government in 1881–85 was still a large borrower, £5,895,000 being raised and expended during that time, while, contrary to the experiences of previous periods, there was an importation on private account of £1,000,000. Tasmania, also, considerably increased its borrowings, the State raising £1,465,000 in the five years, while £425,000 was sent to the colony for investment or was received with the owners. The borrowing of the Western Australian Government for 1881–85 amounted to £463,000, but not more than £265,000 was received for private investment, or in all £728,000.

The next period, 1886–90, was marked by very extraordinary features. The average population of the seven colonies was 3,540,000, yet during

the short space of five years the various States governing these people raised and expended £53,374,000, while an additional sum of £53,714,000 was received for investment on private account, or was introduced into the country by persons who made it their abode. But even more astonishment will be evinced on considering the detailed figures for each colony. Of the large total received by the seven colonies, considerably more than one-half—£54,690,000—was obtained by Victoria, and, as the population of this colony during the five years under review was 1,070,000, the inflow of capital amounted to over £51 per inhabitant. The State and local bodies borrowed and disbursed £16,987,000, which was the largest expenditure from the proceeds of loans that any colony contrived to crowd into the short space of five years. The private capital introduced was £35,792,000, and the sum brought by persons taking up their abode in the country was £1,911,000. These figures afford a sufficient clue to the astounding impetus which trade received during these years, and the corresponding rise in land values. New South Wales, though not the recipient of so much money as its southern neighbour, nevertheless contrived to obtain £28,145,000—a far larger sum than could be conveniently absorbed in five years, especially as in the like preceding period £30,000,000 was absorbed. The capital introduced represented £11,571,000 of Government borrowings, £15,187,000 of private investments, and £1,387,000 brought by persons making New South Wales their home. The Queensland Government was also a large borrower, its loan expenditure during the five years, 1886–90, being not less than £9,581,000. The private capital introduced, however, fell off largely. The sum received, allowing for withdrawals to the amount of £3,360,000, was £1,574,000. The flow of private money to New Zealand practically ceased during the period now under consideration, amounting only to £632,000, as compared with £10,475,000 in the preceding five years; but Government borrowings still continued, and a sum of £6,560,000 was raised and expended. South Australia occupied an exceptional position, for though the Government introduced some £5,693,000, there was a large withdrawal of private capital, or, as it may be, an export of capital for investment in other colonies, so that the net import on public and private account amounted to £1,345,000. Tasmania, with its population of 150,000, was well in the struggle for British investments, the State importation being £2,557,000, and the investment by private persons, £570,000; of this last sum £85,000 was introduced by persons taking up their abode in the colony. It was about this period, too, that Western Australia began to attract attention as a field for investment, for over and above the sum of £425,000 introduced by the Government, about £1,009,000 was invested by private persons, perhaps one-fifth of the amount being accompanied by the investors themselves.

The recitation of borrowing just given brings the financial history of the Australias down to the close of 1890. Two years more of credit and investment remain to be traced, after which came the collapse of

credit, and the events of May, 1893, still so fresh in the public memory. That two years elapsed after the close of 1890 before Australasian public credit in London finally collapsed is true only of Victoria, and in a modified sense of New South Wales, Western Australia, and Tasmania. These colonies continued to be the recipients of British money, but private investments were—excepting in the case of Victoria—on a minor scale. Victoria received fresh capital to the extent of £8,834,000, of which amount only £464,000 was brought in by immigrants. New South Wales received from private investments over £3,000,000, but the withdrawals were also extensive, so that the net amount of capital invested was only £1,711,000. Western Australia received £952,000, of which £408,000 was accompanied by the owners. Tasmania received £792,000, and of this about £271,000 was introduced by permanent residents. Withdrawals of private capital were already in progress before the close of 1890, and were continued from South Australia, but to a less extent than in the preceding period. New Zealand ceased to receive any private money, while Queensland, for the first time in its history, showed a net withdrawal of capital, the amount of which during the two years was £2,011,000, but as the State had introduced £1,917,000, there was an actual withdrawal of £3,928,000. During the two years 1891 and 1892 the total capital imported into the seven colonies was £25,083,000, and of this £18,786,000 was introduced by the various Governments and local bodies.

During the three years which followed there was a withdrawal of private capital from Australasia to the extent of £7,619,000, so that in spite of the importation during the years 1891 and 1892, the quinquennium showed a net withdrawal of £1,322,000. There was during the period a movement of £20,088,000 apparently introduced, and £21,410,000 withdrawn; but this movement was mainly between the colonies themselves, and not between Australasia and Great Britain. Looking at the figures in detail, it would seem that there was an importation in excess of withdrawals of £14,686,000 into Victoria, and £2,382,000 into Western Australia. So far as Victoria is concerned, this introduction of money was not by way of investment; it was merely the recall by the large financial institutions of their capital from other colonies. This withdrawal affected New South Wales and Queensland most largely. £10,162,000 was withdrawn from the latter province during the five years, and it is a great tribute to the resources and stability of that great colony that this withdrawal should have been effected with so little disturbance to its financial position. New South Wales lost £4,481,000, part of which represents deposits gathered in London and withdrawn during the panic, and part transference of capital by branch institutions to the head office in Melbourne. From New Zealand £2,143,000 was withdrawn, and from South Australia £1,698,000. The withdrawal in nearly all cases has been a silent one; and it is only when a financial institution

absolutely fails and the courts are invoked to consent to the removal of assets that the community at large realise the process that has been going on.

Taking the whole period of five years, there was a total of £30,705,000 introduced. Of this sum, £28,653,000 represents the borrowings of the various Governments and local bodies, the share of each being as follows :—

New South Wales	£11,655,000
Victoria	5,430,000
Queensland	2,996,000
South Australia	638,000
Western Australia	2,291,000
Tasmania	1,835,000
New Zealand	3,808,000
Australasia	£28,653,000

Even in this period immigration did not entirely cease, and it is estimated that an amount of £3,374,000 was introduced by persons who took up their permanent abode in the country.

The withdrawal of capital from Australia practically ceased in 1895. Omitting from consideration the transfer of capital from one colony to another, in 1896 and 1897 the sum of £17,482,000 was introduced, not including money brought to the country by the owners. Of this amount the bulk was sent to Western Australia, where the gold-fields claimed much attention from mining speculators. Besides money sent to Australia by persons resident abroad, £1,408,000 was introduced by immigrants.

Banking.

The laws relating to banks and banking at present in force are susceptible of great improvement, and in 1893 the failure of many monetary institutions which posed as banks directed attention to the urgent necessity for entirely revising the conditions under which deposits might be taken from the general public, but so far no new legislation has been enacted. All institutions transacting the business of banking are required by law to furnish, in a specified form, quarterly statements of their assets and liabilities, and from these statements and the periodic balance-sheets the tables in this chapter have been compiled. The returns furnished by the banks, though in compliance with the laws of the colonies, are by no means satisfactory, being quite unsuited to the modern methods of transacting banking business, and they cannot be accepted without question as indicating the stability or instability of the institutions by which they are issued. As a rule, nothing can be

elicited beyond what is shown in the half-yearly or yearly balance-sheets. No uniformity is observed as regards the dates of closing the accounts, and the modes of presentation are equally diverse. Important items which should be specifically stated are included with others of minor import, and, as a rule, current accounts are blended with other accounts instead of being separately shown. The value of the information vouchsafed to the public is illustrated by the fact that it was impossible to obtain from the publications of several institutions suspending payment in 1893 the amount of their liabilities either to the public or the State, and these particulars were never disclosed.

Capital Resources of Banks.

According to the latest information published, the paid-up capital of the twenty-two banks operating in Australasia is £22,334,047, of which £5,815,584, inclusive of £2,000,000 guaranteed to the Bank of New Zealand by the Government of that colony, has a preferential claim on the profits of the companies. Below will be found a statement of the ordinary and preferential capital of each bank at the date shown, with the amount of the reserve fund of the institution. In the case of several companies which were reconstructed, there are reserves which are held in suspense pending realisation of assets, and of them no account has been taken in the table :—

Bank.	Date of Balance-sheet.	Capital paid up.			Reserve Fund.
		Ordinary.	Preferential.	Total.	
		£	£	£	£
Australian Joint Stock Bank (Ld.)	31 Dec., 1897	1,167,208	....	1,167,208	52,000
Bank of Adelaide	28 Mar., 1898	400,000	....	400,000	155,000
Bank of Australasia	12 Oct., 1897	1,600,000	....	1,600,000	800,000
Bank of New South Wales	31 Mar., 1898	1,950,000	....	1,950,000	1,200,000
Bank of New Zealand	31 Mar., 1898	393,042	2,500,000	2,893,042	23,474
Bank of North Queensland (Ld.)	31 Dec., 1897	200,000	....	200,000	....
Bank of Victoria (Ld.)	31 Dec., 1897	1,021,172	416,760	1,437,932	....
City Bank of Sydney	31 Dec., 1897	400,000	....	400,000	100,244
Colonial Bank of Australasia (Ld.)	31 Mar., 1898	490,561	304,044	794,605	....
Commercial Bank of Australia (Ld.)	31 Dec., 1897	873,799	2,117,070	2,990,869	....
Commercial Banking Co. of Sydney (Ld.)	31 Dec., 1897	1,000,000	....	1,000,000	1,010,000
Commercial Bank of Tasmania (Ld.)	28 Feb., 1898	141,492	....	141,492	190,000
English, Scottish, and Australian Bank (Ld.)	30 June, 1897	970,988	....	970,988	....
London Bank of Australia (Ld.)	31 Dec., 1897	1,247,415	171,930	1,419,345	....
National Bank of Australasia (Ld.)	31 Mar., 1898	1,667,898	305,780	1,973,678	50,000
National Bank of New Zealand (Ld.)	31 Mar., 1898	250,000	....	250,000	30,000
National Bank of Tasmania (Ld.)	30 Nov., 1897	152,040	....	152,040	22,500
Queensland National Bank (Ld.)	31 Dec., 1897	456,973	....	456,973	....
Royal Bank of Australia (Ld.)	31 Mar., 1898	150,000	....	150,000	....
Royal Bank of Queensland (Ld.)	31 Dec., 1897	385,875	....	385,875	35,000
Union Bank of Australia (Ld.)	28 Feb., 1898	1,500,000	....	1,500,000	1,000,000
Western Australian Bank	31 Dec., 1897	100,000	....	100,000	175,000

The preceding table shows the position of the capital account at date of balancing; but a number of the banks had made calls on their shareholders which will increase their paid-up capital. The amount of these calls and the total working capital that will be available when they are met are appended :—

Bank.	Capital paid and being called up.		
	Paid up.	Being called.	Total Working Capital.
	£	£	£
Australian Joint Stock Bank (Limited)	1,167,208	7,307	1,174,515
Bank of Adelaide	400,000	.....	400,000
Bank of Australasia	1,600,000	.....	1,600,000
Bank of New South Wales	1,950,000	.....	1,950,000
Bank of New Zealand	2,893,042	106,958	3,000,000
Bank of North Queensland (Limited)	200,000	.....	200,000
Bank of Victoria (Limited)	1,437,932	50,228	1,488,160
City Bank of Sydney	400,000	.....	400,000
Colonial Bank of Australasia (Limited)	794,605	136,144	930,749
Commercial Bank of Australia (Limited)	2,999,869	842,303	3,833,172
Commercial Banking Company of Sydney (Limited)	1,000,000	.....	1,000,000
Commercial Bank of Tasmania (Limited)	141,492	.....	141,492
English, Scottish, and Australian Bank (Limited)	970,988	.....	970,988
London Bank of Australia (Limited)	1,419,345	1,805	1,421,150
National Bank of Australasia (Limited)	1,973,678	8,385	1,982,063
National Bank of New Zealand (Limited)	250,000	.....	250,000
National Bank of Tasmania (Limited)	152,040	.....	152,040
Queensland National Bank (Limited)	456,973	23,027	480,000
Royal Bank of Australia (Limited)	150,000	.....	150,000
Royal Bank of Queensland (Limited)	385,875	775	386,650
Union Bank of Australia (Limited)	1,500,000	.....	1,500,000
Western Australian Bank	100,000	.....	100,000

The paid-up capital of the banking companies now operating in Australasia has increased from £14,724,587 before the crisis to £22,334,047, or by £7,609,460. In 1893, however, there were in existence two banks, with a combined capital of £900,000, which are now defunct; and it should also be mentioned that capital to the amount of £4,731,550 has been written off during the last five years.

Liabilities and Assets of Banks.

The liabilities of the banks enumerated, at the dates which have been previously given, totalled £136,038,546, against which amount assets aggregating £163,864,847 were shown. The following table gives the liabilities of each institution to the public, notes in circulation

and deposits being distinguished from other liabilities. In some cases small items which should be classed with "other liabilities" are included with deposits, as they cannot be distinguished in the balance-sheets; and in the case of the Commercial Bank of Australia, Limited, the accounts of the new bank and the assets trust have been amalgamated :—

Bank.	Notes in Circulation.	Deposits.	Other Liabilities to Public.	Total Liabilities to Public.
	£	£	£	£
Australian Joint Stock Bank (Limited)	128,157	7,372,133	205,337	7,705,627
Bank of Adelaide	115,896	1,905,948	225,274	2,247,118
Bank of Australasia	445,355	12,860,664	2,000,874	15,306,893
Bank of New South Wales	789,677	18,728,463	2,734,058	22,252,198
Bank of New Zealand	593,905	7,626,140	1,514,505	9,734,550
Bank of North Queensland (Limited)	.....	266,134	33,270	299,404
Bank of Victoria (Limited)	135,989	5,133,985	678,069	5,948,043
City Bank of Sydney	66,130	1,094,525	685	1,161,340
Colonial Bank of Australasia (Limited)	97,304	2,306,785	129,843	2,533,932
Commercial Bank of Australia (Limited)	141,540	7,457,773	231,713	7,831,026
Commercial Banking Company of Sydney (Ld.)	416,617	9,699,944	583,807	10,700,368
Commercial Bank of Tasmania (Limited)	41,464	1,294,611	41,181	1,377,256
English, Scottish, and Australian Bank (Ld.)	25,468	4,781,351	277,299	5,084,118
London Bank of Australia (Limited)	148,669	4,910,524	485,120	5,544,313
National Bank of Australasia (Limited)	291,378	6,100,843	599,832	6,992,053
National Bank of New Zealand (Limited)	151,391	2,208,927	346,640	2,706,958
National Bank of Tasmania (Limited)	39,274	353,766	4,499	397,539
Queensland National Bank (Limited)	.....	7,109,748	46,824	7,156,572
Royal Bank of Australia (Limited)	3,926	244,441	149,681	398,048
Royal Bank of Queensland (Limited)	.....	723,511	72,569	796,080
Union Bank of Australia (Limited)	456,681	15,226,464	2,457,975	18,141,120
Western Australian Bank	152,589	1,480,570	90,831	1,723,990

The assets of each bank are shown below :—

Bank.	Coin and Bullion.	Advances.	Other Assets	Total Assets.
	£	£	£	£
Australian Joint Stock Bank (Limited)	1,224,738	6,720,855	980,967	8,926,560
Bank of Adelaide	460,342	1,457,486	919,252	2,837,080
Bank of Australasia	3,941,500	12,063,664	1,760,005	17,765,169
Bank of New South Wales	5,288,840	18,011,677	2,206,374	25,506,891
Bank of New Zealand	1,445,862	6,541,691	4,738,413	12,725,966
Bank of North Queensland (Limited)	44,484	408,779	57,069	510,332
Bank of Victoria (Limited)	980,068	5,160,584	1,314,431	7,455,083
City Bank of Sydney	292,678	1,246,766	138,843	1,678,287
Colonial Bank of Australasia (Limited)	420,823	2,346,015	561,699	3,328,537
Commercial Bank of Australia (Limited)	965,344	8,316,140	1,567,932	10,849,416
Commercial Banking Company of Sydney (Ltd.)	1,999,692	8,583,772	2,182,311	12,765,775
Commercial Bank of Tasmania (Limited)	368,028	1,218,674	126,398	1,713,100
English, Scottish, and Australian Bank (Ltd.)	826,381	4,719,379	520,216	6,065,976
London Bank of Australia (Limited)	846,560	5,653,852	465,085	6,965,497
National Bank of Australasia (Limited)	1,422,742	5,624,478	2,013,635	9,060,855
National Bank of New Zealand (Limited)	367,088	2,383,576	259,239	3,009,903
National Bank of Tasmania (Limited)	111,811	441,134	24,858	577,803
Queensland National Bank (Limited)	935,535	5,780,721	905,289	7,621,545
Royal Bank of Australia (Limited)	30,663	358,539	165,234	554,436
Royal Bank of Queensland (Limited)	212,073	870,029	145,613	1,227,715
Union Bank of Australia (Limited)	3,074,204	15,046,336	2,582,779	20,703,319
Western Australian Bank	614,378	1,172,365	228,859	2,015,602

Results of Working of Banks.

The results of working of each bank for the latest period for which information is available are given below. With the exception of the Bank of Adelaide, the Bank of New Zealand, the English, Scottish, and Australian Bank, the London Bank of Australia, and the National Bank of New Zealand, for which the figures refer to twelve months' operations, the amounts given cover a period of six months. The dates of the balance-sheets are as shown on page 439 :—

Bank.	Class of Shares.	Amount brought forward.	Net Profits less Rebate on Bills current.	Dividend paid.		Amount transferred to Reserve Fund, &c.	Amount carried forward.
				Rate per cent. per annum.	Amount.		
		£	£		£	£	£
Australian Joint Stock Bank (Ltd.)	Ordinary	....	1,725	..	..	....	1,725
Bank of Adelaide	,,	15,561	33,401	7	28,000	5,000	15,962
Bank of Australasia	,,	17,997	40,279	5	40,000	....	18,276
Bank of New South Wales	,,	16,564	88,129	9	87,750	....	16,943
Bank of New Zealand	Preferential / Ordinary	39,391	102,532	3½ / ..	17,500 /	124,423	..
Bank of North Queensland (Limited)	Ordinary	9,369	1,559	..	....	....	10,928
Bank of Victoria (Limited)	Preferential / Ordinary	46,379	22,729	5 / ..	10,419 /	....	58,689
City Bank of Sydney	Ordinary	8,308	8,395	4	8,000	....	8,703
Colonial Bank of Australasia (Ltd.)	Preferential / Ordinary	....	3,398	..	....	3,398	..
Commercial Bank of Australia (Ltd.)	Preferential / Ordinary	4,299	23,222	2 / ..	21,171 /	....	6,350
Commercial Banking Co. of Sydney (Limited)	Ordinary	15,257	40,150	8	40,000	....	15,407
Commercial Bank of Tasmania (Ltd.)	,,	889	3,463	5	3,714	....	638
English, Scottish, and Australian Bank (Limited)	,,	....	10,870	..	....	....	10,870
London Bank of Australia (Limited)	Preferential / Ordinary	1,812	27	..	....	....	1,839
National Bank of Australasia (Ltd.)	Preferential / Ordinary	34,197	10,927	5 / ..	7,644 /	....	37,480
National Bank of New Zealand (Ltd.)	Ordinary	3,657	25,538	6	15,000	10,000	4,195
National Bank of Tasmania (Limited)	,,	1,597	4,127	5	3,991	....	1,733
Queensland National Bank (Limited)	,,	....	8,000	..	2,000	6,000	..
Royal Bank of Australia (Limited)	,,	2,523	3,865	3	2,250	....	4,138
Royal Bank of Queensland (Limited)	,,	3,320	7,440	2½	5,075	2,000	3,685
Union Bank of Australia (Limited)	,,	24,503	47,696	5	37,500	10,000	24,699
Western Australian Bank	,,	23,361	18,251	17½	8,750	25,000	7,862

The amount shown for the Bank of New Zealand, as transferred to the Reserve Fund, was subsequently paid to the Assets Realisation Board according to statutory agreement, with the exception of £10,132 for reduction of the Estates Company's debenture account; while the £2,000 dividend paid by the Queensland National Bank represents a repayment to the Government of that colony in terms of the scheme of arrangement. The Colonial Bank of Australasia, Limited, applied the amount of its profit towards reducing the advances written off as bad. The net

profit shown for the London Bank of Australia is exclusive of the interest on "Transferable Fixed Deposits," which amounted to £139,361. The dividend tax payable by the two Tasmanian banks and the Royal Bank of Queensland has been included in the amount of dividend shown in the table.

Banking Business of each Colony.

Of the twenty-two banks operating in Australasia at the beginning of 1898, thirteen had offices in New South Wales, eleven in Victoria, eleven in Queensland, eight in South Australia, six in Western Australia, four in Tasmania, and five in New Zealand. There were only two banks doing business in all the seven colonies; one transacted business in six colonies; one in five colonies; three in four; one in three; four in two; and ten banks did not extend their business beyond the limits of one colony.

The liabilities and assets of the twenty-two banks of issue operating in the different colonies during the June quarter of 1898 are shown in the following tables. The total liabilities of the banks are given as £103,269,952, and the assets as £135,365,534, showing a surplus of assets of £32,095,582. If the returns gave all the facts in relation to the operations of the banks, this surplus would be represented almost entirely by capital or funds provided out of their own resources; but the capital and reserve funds amount only to £27,427,387, so that there is a balance of about £4,668,195 to be otherwise accounted for. This sum represents part of the deposits obtained in the United Kingdom and used in the Australian business of the banks; the British deposits with Australasian banks total probably not less than twenty millions. The following figures will convey some notion of the business transacted within each colony. It should be noted that under the heading of deposits bearing interest has been included perpetual inscribed stock of the English, Scottish, and Australian Bank (Limited), to the amount of £2,070,358, namely, £707,691 in New South Wales, £1,016,025 in Victoria, and £346,642 in South Australia:—

Colony.	Notes in circulation not bearing Interest.	Bills in circulation not bearing Interest.	Deposits.		Balances due to other Banks, &c.	Total Liabilities.
			Not bearing Interest.	Bearing Interest.		
	£	£	£	£	£	£
New South Wales	1,213,236	120,082	11,269,227	18,760,207	63,598	31,426,350
Victoria	887,375	193,845	10,418,363	18,369,476	267,136	30,136,195
Queensland	.....	144,791	4,283,327	7,871,663	59,140	12,358,921
South Australia	372,210	9,169	2,304,595	3,974,752	57,170	6,717,896
Western Australia	340,678	61,331	2,633,568	975,703	51,046	4,062,326
Tasmania	125,950	12,875	1,701,321	1,279,631	37,947	3,157,724
New Zealand	1,091,985	46,777	5,835,043	8,400,812	35,923	15,410,540
Australasia	4,031,434	588,870	38,445,444	59,632,244	571,960	103,269,952

The preceding table shows that about 95 per cent. of the Australasian liabilities of the banks consisted of deposits, viz., £98,077,688 out of £103,269,952. The statements by banks in each colony, with the exception of Tasmania, distinguish between deposits at call and deposits bearing interest. In Tasmania, although not obliged by law to do so, a similar distinction has been made by two banks out of four, and assuming that in the case of the other two banks the proportion of deposits at call to the total deposits is the same, the total deposits at call are as stated in the table, viz., £38,445,444, or 39 per cent. of all deposits.

The assets for the same period are shown below. Certain assets of small amount, not classifiable under any of the sub-heads of the table, have been included in the total, and in the case of one colony technical over-statements of the assets of some of the banks have been rectified. Also, under the heading of "Notes and bills of other banks," etc., are included Queensland Treasury Notes to the amount of £550,960 :—

Colony.	Coin.	Bullion.	Landed Property.	Notes and Bills discounted, and all other Debts due to the Banks.	Notes and Bills of other Banks, and Balances due from other Banks.	Total Assets.
	£	£	£	£	£	£
New South Wales.....	5,745,965	139,571	1,809,956	34,281,440	588,168	42,565,100
Victoria	6,231,596	476,526	1,983,760	34,125,106	623,678	43,440,666
Queensland	1,646,154	269,979	717,817	13,122,727	770,462	16,527,139
South Australia	2,015,527	14,133	493,296	4,555,200	105,173	7,183,329
Western Australia.....	1,622,741	185,477	157,862	3,265,380	184,043	5,415,503
Tasmania	806,702	....	122,210	2,388,651	37,917	3,355,480
New Zealand	2,677,259	116,465	467,343	13,539,950	77,300	16,878,317
Australasia.....	20,745,944	1,202,151	5,752,244	105,278,454	2,386,741	135,365,534

Metallic Reserves of Banks.

The following table shows the metallic reserves held by the banks as against their total Australasian liabilities, and also against their liabilities at call, viz., deposits at call and note circulation. The table, however, cannot be taken as complete, as some banks receiving deposits

in England and elsewhere do not include such liabilities in their returns :—

Colony.	Coin and Bullion.	Total Liabilities.	Liabilities at Call.	Proportion of Coin and Bullion.	
				To Total Liabilities.	To Liabilities at Call.
	£	£	£	per cent.	per cent.
New South Wales	5,885,536	31,426,350	12,482,463	18·73	47·15
Victoria	6,708,122	30,136,195	11,305,738	22·26	59·33
Queensland	1,916,133	12,358,921	4,283,327	15·50	44·73
South Australia	2,029,660	6,717,896	2,676,805	30·21	75·82
Western Australia	1,808,218	4,062,326	2,974,246	44·51	60·79
Tasmania	806,702	3,157,724	1,827,271	25·55	44·15
New Zealand	2,793,724	15,410,540	6,927,028	18·13	40·33
Australasia	21,948,095	103,269,952	42,476,878	21·25	51·67

It will be seen that Queensland apparently holds the weakest position in the proportion of cash reserves to total liabilities, and New Zealand in proportion to liabilities at call. This, however, means very little, seeing that in some of the colonies many banks profess to hold gold largely in excess of their wishes or requirements.

Expenses of Banking.

The balance-sheets of banks, as presented to the shareholders, do not usually contain details likely to satisfy the inquirer curious to discover the amount of gross profits as compared with the net amount divisible amongst shareholders. Allowing the same proportion of expenses for the banks not disclosing this information as for those concerning which particulars are available, the following results are obtained for the last working year dealt with in the preceding pages :—

Total trading assets	£156,837,000
Capital and reserves	27,427,000
Gross earnings, less reserve for bad and doubtful debts	5,456,000
Gross expenditure, including interest	4,675,000
Net earnings	781,000

Compared with the total assets, the net earnings represent 0·48 per cent. ; and compared with the banks' own resources, *i.e.*, capital and reserved profits, 2·85 per cent. The gross expenditure above set down may be divided into expenses of management, £1,888,000, and interest, £2,787,000 ; these together amount to 85·7 per cent. of the gross

earnings, the management expenses being 34·6 per cent., and the interest 51·1 per cent. It would appear, therefore, that for every £1 of net earnings, the sum of £2 8s. 4d. is spent in management expenses, and £3 11s. 5d. in interest. The cost of working banking institutions in Australia is undoubtedly very large; but this class of business is everywhere expensive, and an analysis of the balance-sheets of some twenty British banks shows that the expenses of management amount to nearly 16s. for every £1 of net earnings.

Compared with their resources, the net earnings of Australasian banks are far less than those of English banks, as will appear from the following statement, which gives the rate per cent. per annum of earnings compared with total resources, including, of course, deposits and issue, as well as shareholders' capital :—

	£ s. d.
Bank of England	1 10 9
English Provincial Banks	1 5 3
Irish Banks	1 11 0
London Banks	1 3 10
Banks of Isle of Man	0 17 8
Scotch Banks	1 1 4
Banks trading in Australasia	0 10 0

The expense of banking in Australasia is largely due to the number of branches open throughout the country; thus in Australasia there are 1,463 banks and branches, or one to every 3,000 persons, while in England the proportion is one bank to 10,000 persons, in Scotland one to every 4,000, and in Ireland one to every 9,000.

Investment Companies.

In addition to the Banks of Issue, there are numerous Savings Banks and Land, Building, Investment, Trading, and Commercial Companies receiving money on deposit and transacting much of the business usually undertaken only by banks of issue. The land, building, and other trading companies were presumed to be in a flourishing condition even as late as the year 1890. Their dividends to shareholders were very large, and the rates allowed on deposits were considerably in excess of those current in the banks of issue. As might be expected, the high interest offered was too tempting a bait to be resisted by a section of the investing public, and large sums were placed in these institutions with the utmost confidence that they would be available when required. This confidence, unfortunately, proved to be, in many instances, unmerited. The shrinkage of land values, and the depreciation of real

estate generally, put an end to all unsound institutions working on speculative lines, as well as to some other companies that were conducted on reasonable principles. The difficulties into which the deposit companies fell may for the most part be attributed to their practice of borrowing money for short periods, and locking it up for long terms. Besides this, however, many so-called building societies indulged in speculative land purchases, and having retailed the land at enhanced prices, with payments over extended periods, proceeded to divide the presumed profits among the shareholders; with a result that might easily have been foreseen, for in many cases the purchasers, after paying a few instalments toward the price, left the allotments on the hands of the companies, whose anticipated profits were therefore purely visionary, and whose dividends were really never earned, but, in many instances, were merely taken from the deposits.

Savings Banks.

The Savings Banks are on a very different footing, being to a greater or less extent under State control and otherwise safeguarded, so that they enjoy public confidence. The institutions classed as Savings Banks may be divided into two kinds—those worked in conjunction with the Post Office, and, consequently, directly administered by the State; and those under trustees or commissioners, who are generally nominated by the Government. The declared objects of these banks are to encourage thrift in the working classes, and to provide a safe investment for the funds of charitable institutions, friendly societies, and such like. The institutions, however, have become so popular that all classes of the community are represented amongst their depositors, and the banking crisis of 1893 had the effect of largely increasing their business.

In New South Wales there are both State and trustee institutions for the receipt of savings, the Post Office Savings Bank having been established in 1871, and the Savings Bank of New South Wales as far back as 1832. In both institutions sums of one shilling and any multiple of that amount may be deposited; but, with the exception of the funds of charitable institutions and friendly societies, deposits exceeding £200 do not bear interest on such excess. From October, 1894, to July, 1896, the Post Office Savings Bank allowed interest at the rate of 3 per cent., with an additional 1 per cent. on accounts open for the full calendar year, but this latter privilege has now been withdrawn. During 1897 the Savings Bank of New South Wales allowed 3 per cent. interest, with an additional ½ per cent. on accounts remaining open at the end of the year. A measure providing for the amalgamation of the two institutions has been prepared by the Government, but up to the present the Bill has not been presented to Parliament.

In Victoria both Commissioners' and Post Office Savings Banks, established in 1842 and 1865 respectively, were in operation until the 30th September, 1897, when they were amalgamated under the Savings Bank Amendment Act of 1896, the Commissioners assuming the control of the new institution. Amounts of one shilling and any multiple thereof are received. The Act referred to further provided for advances to farmers and others, and this portion of the Act was brought into operation without delay. During 1896–7 both the Commissioners' Savings Bank and the Post Office Bank allowed 2½ per cent. interest on sums not exceeding £100, and 2 per cent. from £100 to £250, the latter being the maximum amount carrying interest; while in 1897–8 the same rates were also allowed by the new institution.

In Queensland, a Government Savings Bank, not administered in connection with the Post Office, is in operation, the system dating from 1865. The interest allowed during 1895 was 3½ per cent. on all deposits below £200; but from July, 1896, the rate was reduced to 3 per cent. In December, 1895, authority was obtained for the issue of Savings Bank Stock at 3 per cent. to enable depositors of upwards of £200 to obtain interest on such excess, as it was found that large sums were entrusted to the Government which could not earn interest under the old constitution of the Bank.

In South Australia there is, properly speaking, no Government Savings Bank; but an institution administered by trustees was established in 1848. The rate of interest paid by the trustees has been the subject of many changes. Starting at 3 per cent., it fell as low as 1 per cent. in 1853; rose to 6 per cent. in 1858; and declined to 4 per cent. in 1873. Between the year last mentioned and 1892, interest fluctuated between 5½ and 4½ per cent.; and in 1893 it was reduced to 4 per cent., at which it remained during the years 1894 and 1895, while in 1896 and 1897 it was still further reduced to 3½ per cent. and 3 per cent. respectively, the maximum amount bearing interest being £250.

In Western Australia, Post Office banks have been in operation since 1864. One shilling and upwards may be received, provided not more than £150 is deposited in any one year, while the maximum amount of deposits must not exceed £600. Interest is allowed at the rate of 3 per cent. provided the amount at credit is not less than £1, and not more than £300.

In Tasmania, Post Office and trustee banks are working side by side. Sums of one shilling and upwards may be deposited, the interest allowed during 1897–8 being 3 per cent. both in the Post Office banks and in the trustee institutions. Interest is not allowed on amounts over £150.

In New Zealand, Post Office and trustee institutions are also established. The former commenced operations in February, 1867; but some of the other class of banks are of much older standing, the Auckland Savings Bank, for instance, having been established as far back as 1847. Deposits of one shilling and upwards are received. Interest

was formerly allowed in both classes of institutions at the rate of 4½ per cent. up to £200, and 4 per cent. from £200 to £500; but in July, 1893, the rates allowed in the Government Savings Bank were reduced to 4 per cent. and 3½ per cent. respectively, the maximum amount bearing interest remaining at £500. These rates remained in force until the 1st January, 1896, when the interest was reduced to 3½ per cent. and 3 per cent. respectively; while from the 1st November, 1897, a further reduction was made, the rates ruling from that date being 3 per cent. up to £200, and 2½ per cent. from £200 to £500. The trustee Savings Banks in 1895 allowed 4 per cent., but reduced this rate to 3½ per cent. from the beginning of 1896. In 1897 the interest was increased to 4 per cent. on amounts under £100. A feature of the New Zealand Post Office Savings Bank is that deposits of one shilling may be made by means of postage stamps affixed to cards specially issued for the purpose. This plan was adopted to encourage thrift among children. It was recognised to be a difficult matter for a child to save its pence until they accumulated to a shilling; but under the present system, whenever a child receives a penny it may purchase a postage stamp and affix it to the card in its possession.

The returns of the Savings Banks show an enormous development since the year 1861. At that period the number of depositors in Australasia (excluding Tasmania, for which there are no returns) was 20,062, with the sum of £1,367,396 to their credit, or an average of £47 to each depositor. In 1871 the number of depositors had risen to 115,074, with deposits amounting to £3,675,772; but the average amount credited to each depositor was only £31 18s. 10d. In the year 1881 there were 311,124 depositors, with a total of £9,442,979, averaging £30 7s. for each account. In 1891 the number of depositors had increased to 741,627, and the amount of deposits to £18,943,541, the average being £25 10s. 1d. In 1897–8 the number of depositors had risen to 979,553, with deposits amounting to £30,225,672, giving an average sum of £30 17s. 1d. to each account. It will thus be seen that there has been a decline in the amount per depositor from the period first mentioned; but this is no sign of retrogression, for the large increase in the number of depositors, which must be taken into consideration, evidences the fact that the less affluent classes of the community are more largely represented in the books of the banks than was formerly the case. In point of fact, the proportion of depositors to the entire population has increased all along. Thus, in 1861 the number of persons who had accounts in the Savings Banks represented only 2·31 per cent. of the entire population of Australasia; but in 1871 the percentage had risen to 5·98; in 1881, to 11·33; and in 1891, to 19·47; while in 1897–8 the proportion was 22·34 per cent., an increase being observable in all the colonies. Dealing with the individual colonies, the Queensland depositors have the largest amount at their credit, averaging £41 1s. 11d. per head; New South Wales depositors come second with £40 2s. 9d.; while those of Tasmania have the smallest sum, their average being

only £21 6s. 8d. The subjoined table shows the progress of accumulation in the Savings Banks of each of the colonies since 1871 :—

Year.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.	Australasia.
Number of Depositors.								
1871	24,379	45,819	6,769	14,270	1,062	8,500	14,275	115,074
1881	72,384	101,829	20,168	37,742	3,219	14,728	61,054	311,124
1891	158,426	300,781	46,259	78,795	3,564	26,916	126,886	741,627
1897–8	227,629	338,260	68,124	96,401	26,317	34,868	187,954	979,553
Amount of Deposits.								
	£	£	£	£	£	£	£	£
1871	945,915	1,117,761	407,134	517,000	15,583	217,413	454,966	3,675,772
1881	2,698,703	2,569,438	944,251	1,288,450	23,344	369,278	1,549,515	9,442,979
1891	5,342,135	5,715,687	1,660,753	2,217,419	46,181	554,417	3,406,949	18,943,541
1897–8	9,136,793	8,099,364	2,799,687	3,069,752	856,084	743,913	5,520,079	30,225,672
Average Amount per Depositor.								
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1871	38 16 0	24 7 11	60 2 11	36 4 7	14 13 6	25 11 7	31 17 5	31 18 10
1881	37 5 8	25 4 7	46 16 5	34 2 9	7 5 0	25 1 6	25 7 7	30 7 0
1891	33 14 5	19 0 1	35 18 0	28 2 10	12 19 2	20 12 0	26 17 0	25 10 1
1897–8	40 2 9	23 18 11	41 1 11	31 16 10	32 10 7	21 6 8	29 7 5	30 17 1

The following table shows the average amount per head of population, and the average number of depositors per 100 of population, in each of the colonies for the year 1897–8 :—

Colony.	Average amount per head of Population.	Depositors per 100 of Population.
	£ s. d.	
New South Wales	6 18 1	17
Victoria	6 18 6	29
Queensland	5 17 0	14
South Australia	8 9 1	27
Western Australia	5 14 2	17
Tasmania	4 6 8	20
New Zealand	7 11 5	26
Australasia	6 17 10	22

It will be observed that Victoria had the largest number of depositors per 100 of population ; while the largest amount per head of population was reached in South Australia.

The following table shows the number of depositors in the savings banks of the principal countries of the world, the total amount standing

at their credit, and the average amount per depositor. The figures are compiled from the latest available returns :—

Country.	Depositors.	Amount of Deposits in Savings Bank.	Average Amount per Depositor.
	No.	£	£ s. d.
United Kingdom	8,357,938	150,974,206	18 1 3
Sweden	1,532,586	21,495,477	14 0 6
Norway	540,053	12,523,949	23 3 10
Holland	843,555	9,730,750	11 10 8
Austria-Hungary	5,072,490	189,095,499	37 5 7
Belgium	1,145,408	17,092,683	14 18 6
Italy	4,917,645	82,199,438	16 14 4
France	8,986,631	165,956,748	18 9 4
Denmark	1,030,320	34,790,469	33 15 4
United States	5,201,132	399,048,568	76 14 6
Canada	236,228	12,604,764	53 7 2
Australasia	979,553	30,225,672	30 17 1

The figures for the United States are given on the authority of the official *Statistical Abstract*, and are, to all appearances, correct.

Total Deposits in Banks.

If to the amounts deposited in the savings banks of the colonies be added the deposits in banks of issue, it will be seen that the total sum on deposit in banking institutions is equal to over £29 for each inhabitant of Australasia. The largest amount on deposit as compared with population is found in Victoria, with £31 10s. 10d., or £2 5s. 8d. above the average of all the colonies. The particulars for each province will be found below :—

Colony.	Deposits in Banks of Issue (Averages for the second quarter of 1898).	Deposits in Savings Banks, 1897-8.	Total Deposits.	Amount of Deposits per head of Population.
	£	£	£	£ s. d.
New South Wales	30,029,434	9,136,793	39,166,227	29 11 10
Victoria	28,787,839	8,099,364	36,887,203	31 10 10
Queensland	12,154,990	2,799,687	14,954,677	31 5 2
South Australia	6,279,347	3,069,752	9,349,099	25 15 0
Western Australia	3,609,271	856,084	4,465,355	29 15 8
Tasmania	2,980,952	743,913	3,724,865	21 13 10
New Zealand	14,235,855	5,520,079	19,755,934	27 1 11
Australasia	98,077,688	30,225,672	128,303,360	29 5 2

As already mentioned, large sums are also deposited with various building and investment societies, but the returns with reference to these are incomplete. The latest available figures show that the amounts so invested were :—In New South Wales, £947,806; in Victoria, £855,270; in Tasmania, £161,803; and in New Zealand, £202,847.

In the following table are given the deposits in banks, including savings banks, and, where available, building societies, etc., at four decennial periods, as well as for the year 1897–8 :—

Colony.	1861.	1871.	1881.	1891.	1897-8.
	£	£	£	£	£
New South Wales	5,645,108	7,989,801	23,006,720	42,988,550	40,114,033
Victoria	7,575,406	12,476,677	23,721,348	50,183,551	37,742,473
Queensland	334,503	1,647,830	5,633,097	12,154,657	14,954,677
South Australia	875,320	2,038,719	6,231,004	9,992,338	9,349,099
Western Australia	*2,487	*15,583	*23,344	1,365,906	4,465,355
Tasmania	†729,085	875,512	2,969,390	4,220,292	3,886,668
New Zealand	905,675	3,789,639	10,618,893	17,497,436	19,958,781
Australasia—Total	16,067,584	28,833,761	72,203,796	138,402,730	130,471,086
Australasia—Per head	£13	£15	£26	£36	£30

*Savings Banks only. † Banks of Issue only.

From this table it will be seen that the increase of deposits in all classes of banks between 1861 and 1881 was exactly 100 per cent., allowing for the growth of population; while between 1871 and 1891 the deposits per head of population increased by 140 per cent. When compared with the figures for Great Britain, the amount of deposits per head of population in Australasia far exceeds that in the older country. In 1861, indeed, the sum per head in Great Britain was higher than in Australasia, amounting to £15 as against £13 in the colonies, and in 1874 the British average stood at £25 per head; but ten years later, in 1884, it had sunk to £23, and in 1890 to £16; while in 1896 the rate per head had increased to about £23. In the colonies there was no falling-off at any period until 1893—the total deposits per head in 1888 far exceeding the highest level ever reached in Great Britain. In 1893, however, there was a decline of about ten millions in the sum total of Australasian deposits; that is to say, the commercial depression which prevailed more or less throughout Australasia during that year caused the amount just mentioned to be withdrawn from the savings of the people and to be employed in meeting current expenses and in the maintenance of credit. During 1894 and 1895 there was a further falling-off in Victoria and Tasmania; but the other colonies showed larger deposits in 1895 than in 1893—the Queensland, Western Australia, and New Zealand deposits being even larger than in 1891. In 1897–8 the savings in New South Wales, Queensland, Western Australia and New Zealand were greater than in 1895, while

in the other provinces a decrease occurred, the net increase being about £225,000. The total falling-off in 1897–8, however, as compared with 1891 amounted to nearly eight millions, or £6 per head of population.

In some of the colonies the *Credit Foncier* system has been established in connection with the Savings Banks, and particulars relating to the operations of the system will be found in the chapter dealing with Agriculture.

CURRENCY.

The coins circulating in Australasia are those of the United Kingdom. Gold is the standard, the silver and bronze current being more properly tokens than coins. Gold coins are legal tender to any amount, silver for an amount not exceeding forty shillings, and bronze for one shilling. The standard weight and fineness of each coin are given below. The least current weight of a sovereign is 122·5 Imperial grains, and of a half-sovereign, 61·125 grains :—

Denomination of Coin.		Standard Weight.	Standard Fineness.
		Imperial grains. Troy.	
Gold	Sovereign	123·27447	Eleven-twelfths fine gold, one-twelfth alloy, or decimal fineness ·91666.
	Half-sovereign	61·63723	
Silver	Crown	436·36363	Thirty-seven-fortieths fine silver, three-fortieths alloy, or decimal fineness ·925.
	Double Florin	349·09090	
	Half-crown	218·18181	
	Florin	174·54545	
	Shilling	87·27272	
	Sixpence	43·63636	
	Threepence	21·81818	
		Avoirdupois.	
Bronze	Penny	145·83333	Mixed metal :—Copper, 95 parts ; tin, 4 parts ; and zinc, 1 part.
	Halfpenny	87·50000	
	Farthing	43·75000	

It may be stated here that in Queensland there is a legal paper currency in the shape of Treasury notes, which have now superseded the ordinary bank-notes.

The only coins struck at the Sydney and Melbourne Mints are of gold, though silver and bronze of English coinage are also issued. The amounts of silver and bronze issued during 1897 were, at the Sydney Mint, silver, £17,250, and bronze, £1,890 ; and at the Melbourne Mint, £9,575

and £1,055 respectively. The Sydney Branch of the Royal Mint was opened on the 14th May, 1855, and the Melbourne Branch on the 12th June, 1872. A third branch is in course of establishment at Perth. The amount of gold received for coinage up to the end of 1897, at the Sydney Mint, was 23,433,725 oz., valued at £87,250,534; and the amount received at the Melbourne Mint to the same date was 19,378,380 oz., valued at £70,608,283.

The following table shows the quantity of gold received into the two Mints to the end of 1897, the metal received from outside sources being distinguished from that locally produced:—

Where produced.	Gold received for Coinage.	
	Sydney Mint.	Melbourne Mint.
	oz.	oz.
New South Wales	8,706,228	32,479
Victoria	1,442,689	14,539,130
Queensland	10,314,339	10,049
South Australia	80,222	448,451
Western Australia	6,664	1,277,607
Tasmania	12,365	813,595
New Zealand	2,582,088	2,076,673
Other Countries	28,525	169,953
Old Coin, etc.	260,605	10,443
Total	23,433,725	19,378,380

The total value of gold raised in Australasia to the end of 1897 was £399,381,186, of which amount 39 per cent. passed through the Sydney and Melbourne Mints.

The following table shows the amount of gold coin and bullion issued by each Mint to the end of 1897:—

Mint.	Sovereigns.	Half-sovereigns.	Bullion.	Total Value of Coin and Bullion issued.
	£	£	£	£
Sydney	81,283,500	2,622,500	3,180,245	87,086,245
Melbourne	70,608,283	442,292	6,004,221	77,054,796
Total	151,891,783	3,064,792	9,184,466	164,141,041

The quantity of gold received into the Sydney Mint in 1897 was 756,964 oz., valued at £2,677,495, of which only 203,415 oz., or about 27 per cent., were the produce of New South Wales. Queensland contributed 526,430 oz., or nearly 70 per cent. of the whole, the remainder being chiefly New Zealand and Western Australian produce. The amount of gold received into the Melbourne Mint for the same year was 1,380,364 oz., of which 817,331 oz., or 59 per cent., were the produce of Victoria, while 30 per cent. came from Western Australia.

The gold coins issued from the Sydney Mint in 1897 comprised 2,532,000 sovereigns, while the Melbourne Mint issued 5,130,565 sovereigns during the year. No half-sovereigns have been issued by either branch since 1893, with the exception of 218,946 coins of that denomination issued in Victoria in 1896. The value of the gold coinage issued from the Sydney, Melbourne, and London Mints was as follows:—

	£
Sydney	2,532,000
Melbourne	5,130,565
London	1,820,497

Besides gold coin, the Sydney Mint during 1897 issued gold bullion to the value of £130,448, and the Melbourne Mint, to the value of £213,430.

The annual report of the Deputy-Master of the Royal Mint for 1897 shows the value of silver coin issued to and withdrawn from, and the value of bronze coin issued to each of the Australasian colonies during the twenty-six years 1872–97, to have been as follows :—

Colony.	Silver Coin.			Bronze Coin issued.
	Issued.	Withdrawn.	Net Issue.	
	£	£	£	£
New South Wales	663,700	145,221	518,479	32,350
Victoria	774,550	281,232	493,318	31,535
Queensland	233,600	4,750	228,850	2,595
South Australia	234,300	2,176	232,124	11,905
Western Australia	67,700	3,290	64,410	1,870
Tasmania	50,400	23,443	26,957	1,320
New Zealand	231,535	.....	231,535	13,885
Australasia	2,255,785	460,112	1,795,673	95,460

These figures show an annual increase in the circulation of silver of £69,100, and of bronze of £3,700, but no allowance is made in the figures for coin brought to the colonies or taken away by passengers.

Complete information regarding worn coin is not available for the Melbourne Mint; the following figures, therefore, refer to Sydney only. From 1873, when the Mint first received worn silver coin, until 1897, the

amount of silver withdrawn from circulation was of the nominal value of £159,990. The actual weight after melting was 510,308 oz., and the corresponding weight of new coinage would be 581,780 oz. The loss while the coins were in circulation was therefore 71,472 oz., the average loss being 12·29 per cent. From 1876 to 1897 gold coin of the nominal value of £824,995 was received at the Sydney Mint for recoinage, and was found to have an actual value of £822,275. The loss amounted, therefore, to £2,720, or 0·33 per cent.

As has already been pointed out, standard silver consists of ·925 pure metal and ·075 alloy. A pound troy of standard silver is coined into sixty-six shillings; that is to say, 11·1 ounces of fine metal produce coin to the value of £3 6s. The average price of silver during 1897 was 2s. $3\frac{9}{16}$d. per ounce, which for 11·1 ounces gives the sum of £1 5s. 5d.; so that, after making due allowance for Mint expenses and loss entailed by abrasion of the coinage, it is evident that the British Government derives a fairly large profit from the silver coin issued to Australasia. This explains why the Governments of New South Wales and Victoria have approached the Imperial authorities for permission to coin silver to the value required for circulation in the colonies. With the present limited population of Australasia, however, it is doubtful whether the profits would do more than pay for the outlay necessary in connection with the minting.

Life Assurance.

All the colonies except New South Wales have special laws regulating the business of life assurance. Except that of Queensland, the Life Assurance Acts require yearly statements to be made showing the total business of companies in operation, and also certain particulars regarding the transactions within their own colony. In New South Wales no special law has been passed, and companies doing this class of business are either registered under the Companies or Friendly Societies Act, or incorporated by special Act. In the other colonies the Acts regulating the business of life assurance deal chiefly with deposits to be made by companies commencing business, and with returns of business transacted. In no province are the full returns officially published; nevertheless, interesting and valuable reports are prepared and circulated by several of the companies, and all information reasonably to be desired is given in their pages. Other companies pursue a different course, and disclose very few particulars of their business. However, from such sources as are available, the information contained in the following pages has been compiled.

Of the sixteen companies doing business in the colonies, four have their head-offices in New South Wales, six in Victoria, one in South Australia, one in New Zealand, one in the United Kingdom, and three in the United States. The English company—the Liverpool and London and Globe Insurance Company—has only lately commenced operations in Australia, and as the only particulars concerning its

business which are available are the number of policies in force on the 31st March, 1896 (1,028), the total sum assured exclusive of bonuses (£566,647), and the amount of the annual premiums (£15,627), the company is not enumerated in the following tables. The Mutual Assurance Society of Victoria was amalgamated with the National Mutual Life Association at the beginning of 1897, and consequently the figures in the tables show the transactions of the new company, with the exception of the actuarial investigation results given below.

The results of the latest published actuarial investigations of the various societies are appended :—

Institution.	Year of Foundation.	Basis of Valuation.	Date of last Valuation.	Net or present Liability.	Surplus.
		per cent.		£	£
Australian Mutual Provident Society	1849	3½ (a)	31 Dec., 1897	14,003,053	467,693
Mutual Life Association of Australasia	1869	4 (q)	31 ,, 1894	963,477	85,508
City Mutual Life Assurance Society (Ltd.) ..	1879	4 (t)	31 ,, 1897	153,085	11,115
Citizens' Life Assurance Company (Ltd.)	1886	3½ (a)	31 ,, 1897	136,264	18,954
Australian Alliance Assurance Company	1862	3½ (t)	31 ,, 1897	273,827	9,235
National Mutual Life Association of Australasia (Ltd.)	1869	4 (t)	30 Sept., 1895	1,390,529	169,695
Mutual Assurance Society of Victoria (Ltd.)..	1870	4 (q)	31 Dec., 1895	795,170	70,702
Australian Widows' Fund Life Assurance Society (Ltd.).....	1871	4 (q)	31 Oct., 1896	1,166,499	156,662
Colonial Mutual Life Assurance Society (Ltd.)	1874	4 (q)	31 Dec., 1894	1,567,431	226,198
Australasian Temperance and General Mutual Life Assurance Society (Ltd.)	1876	3½ (q)	30 Sept., 1895	165,427	2,219
Victoria Life and General Insurance Company	1888	.....	.....	†.....	†.....
Adelaide Life Assurance and Guarantee Company	1866	4 (q)	30 June, 1892	18,322	22,124
New Zealand Government Life Insurance Department	1870	4 (t)	31 Dec., 1896	2,366,342	225,000
Equitable Life Assurance Society of the United States.....	1859	4 (a)	31 ,, 1897	38,421,494	10,508,995
New York Life Insurance Company	1845	4 (a)	31 ,, 1897	33,941,580	6,866,673
Mutual Life Insurance Company of New York	1843	4 (a)	31 ,, 1897	44,447,408	7,291,210

(a) Annual. (t) Triennial. (q) Quinquennial. † Information not available.

The net or present liability represents the present value of the sums assured in respect of whole life and endowment assurance, reversionary bonuses, endowments, and annuities in force at date of valuation, less the present value of the future pure premiums thereon. The surplus given represents the amount available for distribution amongst policy-holders, and actuarial and commercial reserves.

Of these fifteen companies, ten are mutual, and the remainder are what is termed in insurance parlance "mixed"—that is, proprietary companies dividing profits with the policy-holders. Two of the institutions also transact industrial business, while one company also undertakes fire and guarantee risks, and another does guarantee as well as life business. Most of the offices have representatives in all the colonies. Three institutions have extended their operations to London, and one also to South Africa. The New Zealand Government does not transact any business outside that colony.

The following table gives the policies in force and the sums assured in each society at the close of 1897. The item "Sums assured" means the sums payable, exclusive of reversionary bonuses, at death, or on attaining a certain age or at death before that age :—

Institution.	Policies in force, exclusive of Annuities.	Assurances.			Annual Premium Income.
		Sums Assured, exclusive of Bonuses.	Bonus Additions.	Total.	
	No.	£	£	£	£
Australian Mutual Provident Society	134,034	41,726,041	8,163,978	49,890,019	1,363,545
Mutual Life Association of Australasia	17,281	4,537,640	249,261	4,786,901	146,475
City Mutual Life Assurance Society (Ltd.)	7,105	958,094	29,327	987,421	34,269
Citizens' Life Assurance Company (Ltd.)	14,986	1,798,740	45,778	1,844,518	72,142
Australian Alliance Assurance Company	1,493	524,354	44,703	569,057	17,843
National Mutual Life Association of Australasia (Ltd.)	43,502	9,888,494	662,297	10,550,791	326,219
Australian Widows' Fund Life Assurance Society (Ltd.)	19,811	4,314,052	220,916	4,534,968	157,300
Colonial Mutual Life Assurance Society (Ltd.)	32,608	10,425,370	286,920	10,712,290	327,078
Australasian Temperance and General Mutual Life Assurance Society (Ltd.)	6,266	956,391	17,856	974,247	35,017
*Victoria Life and General Insurance Co.	401	190,132	36,113	226,245	5,681
*Adelaide Life Assurance and Guarantee Company	107	38,600	.....	38,600	886
New Zealand Government Life Insurance Department	35,921	9,002,601	854,409	9,857,010	262,163
†Equitable Life Assurance Society of the United States	7,882	3,950,166	‡	3,950,166	131,621
†Mutual Life Insurance Company of New York	2,212	1,403,785	‡	1,403,785	60,763
†New York Life Insurance Company	2,932	1,733,773	‡	1,733,773	97,340
Total	326,541	91,448,233	10,611,558	102,059,791	3,038,342

* Year ended December, 1895. † Australasian business only for year 1896.
‡ Included in preceding column.

The following table shows the business in force at the close of each of the last three years :—

Institution.	Amount Assured, excluding Bonuses and Annuities.		
	1895.	1896.	1897.
	£	£	£
Australian Mutual Provident Society	40,084,836	40,731,231	41,726,041
Mutual Life Association of Australasia	4,241,105	4,445,575	4,537,640
City Mutual Life Assurance Society (Ltd.)	839,633	892,850	958,094
Citizens' Life Assurance Company (Ltd.)	1,143,111	1,465,772	1,798,740
Australian Alliance Assurance Company	599,939	558,830	524,354
National Mutual Life Association of Australasia (Ltd.)	6,305,632	6,557,028	9,888,494
Australian Widows' Fund Life Assurance Society (Ltd.)	4,457,068	4,422,260	4,314,052
Colonial Mutual Life Assurance Society (Ltd.)	10,361,450	10,351,235	10,425,370
Australasian Temperance and General Mutual Life Assurance Society (Ltd.)	840,072	922,898	956,391
Victoria Life and General Insurance Company	38,600	*	*
Adelaide Life Assurance and Guarantee Company	190,132	*	*
New Zealand Government Life Insurance Department	8,609,936	8,754,803	9,002,601
†Equitable Life Assurance Society of the United States	3,985,166	3,950,166	*
†Mutual Life Insurance Company of New York	1,336,860	1,403,785	*
†New York Life Insurance Company	1,658,000	1,733,773	*

* Information not available. † Australasian business only, but inclusive of bonus additions.

The receipts of the societies are chiefly represented by the collections from premiums on policies and the interest arising from investments of the accumulated funds; while payments on account of policies matured and surrendered, cash bonuses, and expenses of management chiefly comprise the disbursements. The receipts and disbursements during 1897 of each society having its head office in Australasia, were as follow:—

Institution.	Receipts.	Expenditure.	Excess Receipts (Addition to Funds).
	£	£	£
Australian Mutual Provident Society	2,080,566	1,329,527	751,039
Mutual Life Association of Australasia	208,576	154,144	54,432
City Mutual Life Assurance Society (Ltd.)	41,229	20,914	20,315
Citizens' Life Assurance Company (Ltd.)	70,012	25,304	44,708
Australian Alliance Assurance Company	31,746	27,288	4,458
National Mutual Life Association of Australasia (Ltd.)	419,861	279,630	140,231
Australian Widows' Fund Life Assurance Society (Ltd.)	211,307	162,302	49,005
Colonial Mutual Life Assurance Society (Ltd.)	397,012	284,643	112,369
Australasian Temperance and General Mutual Life Assurance Society (Ltd.)	42,787	27,198	15,589
Victoria Life and General Insurance Company	17,244	9,467	7,777
Adelaide Life Assurance and Guarantee Company	928	1,645	*717
New Zealand Government Life Insurance Department	398,121	264,358	133,763
Total	3,919,389	2,586,420	1,332,969

* Denotes decrease.

The aggregate receipts and disbursements of the twelve Australasian institutions during 1897 were as follow:—

Receipts.		Expenditure.	
	£		£
Premiums—		Claims	1,318,924
New	250,111	Surrenders	569,935
Renewals	2,407,738	Annuities	39,427
Consideration for Annuities	62,655	Cash Bonuses and Dividends	89,889
Interest	1,187,771	Expenses	515,022
Other Receipts (Rents, etc.)	11,114	Amount written off to Depreciation, Reserves, etc	53,223
Total £	3,919,389	Total £	2,586,420

It will be seen that the combined amount of interest earned and rents received was insufficient to meet the demands under the head of claims. The difference to be made good from other sources, however, was small. A similar condition of affairs has obtained since 1894; but for many years prior to that date the amount earned more than met the expenditure on account of claims. The change just indicated may be attributed to two causes, firstly, the large number of discontinuances which have followed in the train of the depression, so that when the new business has been set against that which has lapsed, the net

result is either only a slight increase or even a shrinkage in the volume of assurances in force, and, secondly, the lower rate of interest lately realised on investments, which in 1897 only amounted to 4·51 per cent., as against 5·54 per cent. in 1893.

Assets and Liabilities of Assurance Companies.

The societies publish annually a statement of assets and liabilities, with the object of showing the distribution of the accumulated funds and the amount placed to commercial reserve. The return is, however, in no way connected with the valuation balance-sheet prepared at the date of the actuarial investigation. The assets and liabilities for each institution, for the financial year of 1897, were as shown in the subjoined table :—

Institution.	Assets.			Liabilities.		
	Loans on Mortgages and Policies.	Government and Municipal Securities, Freehold Property, Cash on Deposit, etc., etc.	Total.	Assurance Endowment and Annuity Funds.	Paid-up Capital, Reserve Funds, etc., etc.	Total.
	£	£	£	£	£	£
Australian Mutual Provident Society	12,007,589	2,920,641	14,928,230	14,479,578	448,652	14,928,230
Mutual Life Association of Australasia	779,360	421,046	1,200,406	1,190,193	10,213	1,200,406
City Mutual Life Assurance Society (Ltd.)	101,968	63,256	165,224	164,200	1,024	165,224
Citizens' Life Assurance Company (Ltd.)	98,495	59,661	158,156	155,218	2,938	158,156
*Australian Alliance Assurance Company	255,637	296,871	552,508	284,786	267,722	552,508
National Mutual Life Association of Australasia (Ltd.)	1,805,009	937,894	2,742,903	2,703,701	39,202	2,742,903
Australian Widows' Fund Life Assurance Society (Ltd.)	1,030,118	225,102	1,255,220	1,247,188	8,032	1,255,220
Colonial Mutual Life Assurance Society (Ltd.)	1,139,756	1,019,526	2,159,282	2,113,624	45,658	2,159,282
†Australasian Temperance and General Mutual Life Assurance Society (Ltd.)	142,695	92,235	234,930	198,708	36,222	234,930
Victoria Life and General Insurance Company	209,860	157,565	367,425	230,592	136,833	367,425
‡Adelaide Life Assurance and Guarantee Company	21,462	33,595	55,057	38,143	16,914	55,057
New Zealand Government Life Insurance Department	1,482,983	1,305,687	2,788,670	2,725,106	63,564	2,788,670
Total £	19,074,932	7,533,079	26,608,011	25,531,037	1,076,974	26,608,011

* Inclusive of Fire and Guarantee Branches, which cannot be separated. † Inclusive of the Industrial Branch, the assets of which cannot be divided under the heads shown. ‡ Inclusive of Guarantee Branch.

Nearly three-fourths of the total assets are represented by loans on mortgage and on policies; indeed, in these colonies insurance companies are almost restricted to these forms of investment. The remaining items require no special comment, except loans on personal security, combined with life assurance. Investments of this character are unusual in Australasia, the amount invested aggregating only £86,962. In some of the colonies the companies are obliged by law to deposit certain sums with the Treasury as a guarantee of good faith, and the amount so lodged is included either under the head of Government securities or of deposits.

Expenses of Management of Assurance Companies.

The ratio of expenses of management to premium income and gross receipts must necessarily vary according to the age of the society and the proportion of new business transacted. The figures are given for what they are worth. That a more exact comparison cannot be made is the fault of certain companies which fail to make a complete disclosure of their affairs, and do not distribute their expenses of management so that the cost of new business may be distinguished from that of old business; the reports of other companies are unequalled in any part of the world:—

Institution.	Expenses of Management.		
	Amount.	Proportion to—	
		Premium Income.	Gross Receipts.
	£	per cent.	per cent.
Australian Mutual Provident Society	181,579	13·51	8·65
Mutual Life Association of Australasia	41,676	27·73	19·98
City Mutual Life Assurance Society (Ltd.)	9,304	28·33	22·57
Citizens' Life Assurance Company (Ltd.)	10,502	16·24	10·83
Australian Alliance Assurance Company	4,177	21·17	13·16
National Mutual Life Association of Australasia (Ltd.)	77,652	25·74	13·91
Australian Widows' Fund Life Assurance Society (Ltd.)	37,635	25·15	17·81
Colonial Mutual Life Assurance Society (Ltd.)	79,421	25·50	20·00
Australasian Temperance and General Mutual Life Assurance Society (Ltd.)	11,888	34·72	27·78
Victoria Life and General Insurance Company	2,024	37·08	11·73
Adelaide Life Assurance and Guarantee Company	*.....	*.....	*.....
New Zealand Government Life Insurance Department	59,164	21·94	14·86

* Included in expenses of guarantee branch.

Assurance in various Countries.

The average amount assured per policy for each colony, and for the United Kingdom, Canada, and the United States, is given in the following table. The figures in some instances are probably somewhat overstated, as all the companies do not show complete returns of the

business in each colony; but the results may be taken as a fair estimate for each province. The Australasian business of the American institutions excluded from the previous returns, has been included for the purpose of establishing the Australian averages:—

Country.	Average sum assured per Policy.	Average Premium per £100 of Assurance.
	£	£ s. d.
Australasia	280	3 6 5
New South Wales	318	3 3 2
Victoria	279	3 5 11
Queensland	315	3 0 8
South Australia	242	3 6 11
Western Australia	315	3 1 1
Tasmania	264	3 6 5
New Zealand	264	3 0 1
United Kingdom	397	3 7 6
United States	502	.....
Canada	347	.....

The average amount of assurance per head of population was, in Australasia, £21; in Canada, £13; in the United Kingdom, £13; and in the United States £15; while the average number of policies per thousand of population was, in Australasia, 74; in Canada, 37; in the United Kingdom, 32; and in the United States, 30.

The average policy is scarcely a fair measure of thrift. In these colonies mutual assurance is the rule, and members of the various societies have acquired large bonus additions. The average existing policy, including reversionary bonus, of the Australasian companies, on the 31st December, 1897, was £312, as compared with the £280 shown in the comparative table.

It would seem that the practice of assuring life is much more prevalent in Australasia than in any of the other countries instanced; and although the average sum assured by each policy is less, the number of policies is so much greater, as compared with the population, that the amount assured per inhabitant is considerably higher.

Friendly Societies.

The services which friendly societies directly render to the State in enabling the labouring classes to combine for the making of due provision to meet unforeseen demands in the case of sickness or death, are clearly recognised by the Governments of the various colonies, and all such societies which are registered according to law are granted certain privileges in consideration of the important part which they play in the social welfare of the community, in relieving the public purse of claims

which would otherwise have to be preferred against it, and in maintaining the independence of their members and obviating the necessity of those members accepting aid which would have a tendency to pauperise them. The Acts regulating the operations of friendly societies in the colonies are all based on English legislation; and, generally speaking, the following privileges, which are granted to members of such societies in the colony of New South Wales, may be taken as typical of those enjoyed in Australasia:—

1. A registered Society can legally hold land and other kinds of property in the names of trustees, such property passing from one trustee to another by the mere fact of appointment; and can carry on all legal proceedings in the trustees' names.
2. The Society has a remedy on summary conviction whenever any person—
   (*a*) Obtains possession of its property by false representation or imposition;
   (*b*) Having possession of any of its property, withholds or misapplies it;
   (*c*) Wilfully applies any part of such property to purposes other than those expressed or directed by the rules and authorised by the Act.
3. If an officer of the Society dies or becomes bankrupt or insolvent, or if an execution is issued against him whilst he has money or property of the Society in his possession by virtue of his office, the trustees of the Society are entitled to claim such money or property in preference to any other creditors.
4. The documents of the Society are free from stamp duty.
5. The Society can admit members under twenty-one and take from them binding receipts, which would otherwise be of no effect.
6. If it invests money on mortgage, such mortgages can be discharged by a mere endorsed receipt without reconveyance.
7. Its officers are legally bound to render account and give up all money or property in their possession on demand or notice, and may be compelled to do so.
8. Disputes can be legally settled according to the Society's own rules.
9. Members of registered Friendly Societies have the privilege of legally insuring money, on the deaths of their wives and children, for their funeral expenses, without having an insurable interest in their lives.
10. Members of registered Societies may dispose at death of sums payable by the Society by written nomination without a will; and this nomination may be made by youths of sixteen who cannot make a will till they are twenty-one.

11. Where there is no will and no nomination, the trustees may distribute sums without letters of administration being taken out (a person doing so in any other case would make himself liable for the debts of the deceased).

The Acts contain provisions inserted with the object of securing the solvency of the societies. In most of the colonies these provisions have been operative; but in New South Wales and in Queensland the position of the various orders is not so satisfactory as it should be, and steps have, therefore, been taken to place the affairs of the societies on a proper actuarial basis. A new Friendly Societies' Bill is shortly to be submitted to the New South Wales Legislature.

In the following table will be found the number of societies, the number of lodges or branches of these societies, the aggregate number of members, the total amount of their funds, and the average amount per member in each of the colonies. The figures are for the latest available periods, the dates being set forth below :—

Colony.	Date.	Societies.	Lodges or Branches.	Members.	Total Funds.	Average Amount of Funds per member.
		No.	No.	No.	£	£ s. d.
New South Wales	31 Dec., 1896	40	817	63,073	561,813	8 18 2
Victoria	31 Dec., 1896	32	1,074	80,691	1,155,408	14 6 5
Queensland	31 Dec., 1896	17	297	21,901	173,546	7 18 6
South Australia	31 Dec., 1895	15	487	42,703	475,654	11 2 9
Western Australia	31 Dec., 1896	15	41	3,124	38,016	12 3 5
Tasmania	31 Dec., 1896	20	123	10,426	89,145	8 11 0
New Zealand*	31 Dec., 1896	12	392	31,825	611,826	19 4 6
Australasia		151	3,231	253,743	3,105,408	12 4 9

* Exclusive of 30 isolated, specially authorised societies, and 12 working men's clubs.

It will be seen from the foregoing table that, taking the average amount of funds per member as the basis of comparison, New Zealand occupies first position with the sum of £19 4s. 6d.; Victoria comes next with £14 6s. 5d.; Western Australia takes third place with £12 3s. 5d. per member; South Australia comes next with £11 2s. 9d.; and then follow New South Wales and Tasmania in the order named, with £8 18s. 2d. and £8 11s. respectively; Queensland having the smallest amount, viz., £7 18s. 6d., to the credit of each individual member.

Money Orders.

The business transacted in the various Postal Departments under the system of money orders has grown to very large dimensions. This increase is due mainly to the greater facilities now afforded for the transmission of money by this method, though it is also to some extent attributable to the more general appreciation of the system by the

working classes. The following is a statement of the business transacted during 1897 :—

Colony.	Orders issued.		Orders paid.	
	Number.	Amount.	Number.	Amount.
		£		£
New South Wales	393,299	1,311,850	403,779	1,421,524
Victoria	214,389	662,765	328,122	1,162,386
Queensland	120,139	438,898	85,342	348,700
South Australia	80,503	234,187	92,805	343,479
Western Australia	251,878	1,059,529	60,428	247,611
Tasmania	102,775	204,510	209,518	307,612
New Zealand	293,659	970,831	215,240	837,209
Australasia	1,456,642	4,882,570	1,395,234	4,668,521

The average amount of each money order issued was £3 7s., and the business done by New South Wales greatly exceeded that of any other colony of the group. The average value of money orders issued in the United Kingdom during 1896 was £2 15s.

Postal Notes.

Besides the money orders mentioned above, a system of postal notes is in force in all the colonies. The notes are issued for fixed amounts, varying from 1s. to 20s. The number and value of notes issued and paid during 1897 in each of the colonies were as follow :—

Colony.	Notes issued.		Notes paid.	
	Number.	Amount.	Number.	Amount.
		£		£
New South Wales	1,034,943	377,282	1,020,095	371,785
Victoria	1,063,824	426,328	1,088,271	434,154
Queensland	212,182	81,275	198,541	75,010
South Australia	252,346	85,501	269,585	92,518
Western Australia	14,309	3,715	.....	.....
Tasmania	41,435	12,805	42,445	13,448
New Zealand	409,866	137,114	407,610	134,045
Australasia	3,028,905	1,124,020	*3,026,547	*1,120,960

* Exclusive of Western Australia.

These figures show that, for the transmission of small amounts, postal notes are rapidly superseding money orders. While in 1897 the number of money orders issued was less than half that of postal notes, the value of the latter did not amount to one-fourth of the value of money orders, the average value of postal notes being 7s. 5d., as compared with £3 7s. for money orders.

Bankruptcies.

The bankruptcy laws of the different colonies are even more dissimilar than the laws on most other questions of importance; they have also been fluctuating, and the subject of many experiments and amendments. This renders any work of comparison difficult and unsatisfactory. For the year 1896 complete returns are available, and are given below. In connection with the table it must be pointed out that the figures are exclusive of 104 liquidations in Queensland, with liabilities stated at £234,132, and assets at £169,459; and also of 176 private arrangements under the Insolvency Act in South Australia, for which the assets and liabilities are not stated:—

Colony.	Number of Sequestrations.	As shown in Bankrupts' Schedules.		
		Liabilities.	Assets.	Deficiency.
		£	£	£
New South Wales...	1,040	627,314	409,928	217,386
Victoria	755	1,414,752	365,290	1,049,462
Queensland.....	332	98,599	62,230	36,369
South Australia.....	64	47,609	28,522	19,087
Western Australia..	42	358,175	26,259	331,916
Tasmania	95	34,943	9,404	25,539
New Zealand	412	460,545	308,963	151,582
Australasia.....	2,740	3,041,937	1,210,596	1,831,341

Little, if any, reliance can be placed upon the statements made by bankrupts as to the state of their affairs, the assets being invariably exaggerated. Taking the figures given above for what they are worth, it would appear that the average amount of liabilities per bankrupt was £1,110, and of assets, £442, showing a deficiency of £668. In the following table the average figures for the ten years ended 1896 are given, except where radical alterations in bankruptcy legislation, or the absence of complete returns for the whole period, have made it necessary to take a shorter period; the assets, however, have been omitted, as the statements, as far as some of the colonies are concerned, are palpably worthless:—

Colony.	Number of Sequestrations.	Liabilities, as shown in Bankrupts' Schedules.
		£
New South Wales (9 years).....	1,238	1,203,651
Victoria	845	3,071,512
Queensland (9 years)	308	197,977
South Australia	87	77,467
Western Australia (4 years).....	40	130,347
Tasmania (8 years)	132	81,208
New Zealand	641	685,752
Australasia	3,291	5,447,914

LAND AND SETTLEMENT.

IN each of the seven colonies of Australasia a different system has been adopted to secure the settlement of an industrial population upon the Crown lands, the conditions upon which land may be acquired being of a more or less liberal nature according to the circumstances in which a colony has found itself placed. The legislation of Victoria, Queensland, and Tasmania, which at one time formed part of New South Wales, bears a strong resemblance to that of the mother colony, practically the same form of conditional occupation with deferred payments being in existence in all four provinces. In the other colonies, however, the influence of New South Wales was not so directly felt, and new experiments were made. South Australia, for instance, was originally settled upon the Wakefield system—alike remarkable for its originality and its failure. In Western Australia and New Zealand, under pressure of a different set of circumstances, settlement was effected by legislation of a novel character. An attempt is made here to give a description of the land laws of the colonies, although the radical changes which are constantly being made render the task of giving a serviceable account of the various systems a somewhat difficult one. During the past five years, numerous Acts affecting State lands have been placed in the statute book, and, at the date of the publication of this volume, New South Wales and Victoria contemplate amending legislation, so that it is impossible to say how long the information given in this chapter can be taken as representing the latest phases of land legislation in Australasia.

New South Wales.

With the progress and development of the colony, the land laws of New South Wales have naturally undergone considerable alteration. In the earliest period alienation was effected by grants, orders, and dedications, the power of disposal resting solely with the Governor. In August, 1831, the principle of sale by auction was introduced, the minimum price for country lands being fixed at 5s. per acre. This was raised to 12s. in 1839, and to 20s. in 1843, power being given in the latter year to select at the upset price country portions for which a bid was not forthcoming at auction, or upon which the deposit paid at the time of sale had been forfeited. This was the first appearance of the principle of selection in the laws of the colony, but it was limited to lands which had been surveyed for sale by auction.

The discovery of gold in 1851, and the consequent rush of population to Australia, greatly altered the conditions of colonisation. As the interest in gold-digging declined, so did the desire for settlement on the land increase, and the question had to be dealt with in an entirely new spirit, to meet the wants of the class of immigrants desirous of being placed upon the soil. The agitation which thus sprang up resulted in the passing of the Crown Lands Act of 1861, under the leadership of Sir John Robertson. This measure was designed to secure the establishment of an agricultural population side by side with the pastoral tenants. With this object in view an entirely new principle was introduced—that of free selection in limited areas before survey, coupled with conditions of residence and improvement—and country lands were sold at 20s. per acre, payable by annual instalments carrying interest.

The occupation of waste lands for pastoral purposes was at first allowed under a system of yearly licenses. Any person could apply for such a license, the extent of the run which it was desired to occupy being limited only by the boundaries of the surrounding stations. The fee was fixed at £10 per annum for a section of 25 square miles, with £2 10s. for every additional 5 square miles. This system of yearly licenses was succeeded by one under which the squatter was given fixity of tenure, the fee payable being calculated upon the stock-carrying capacity instead of upon the area of the run. Still another system was inaugurated by the Occupation Act of 1861, the period of tenure being limited to five years in all but first-class settled districts, and the whole of the pastoral leases left open to the operations of the free selectors. But such evils were found to result from this system that in 1884, in 1889, and again in 1895, Parliament was led to adopt amendments which are now in force, and which, while maintaining the principle of selection before survey, aim at giving fixity of tenure to the pastoral lessee and obtaining a larger rental from the public lands, while at the same time securing land to *bona-fide* settlers on terms and conditions within the reach of all.

For the purposes of lands administration, the colony is split up into three divisions, each of which is subdivided into land districts. One or more of these land districts form a local division, the administration of which is entrusted to a Local Land Board, comprising a chairman and not more than two assessors. The decisions of these Local Land Boards may be appealed against to the Land Appeal Court. This Court is composed of a President and two members appointed by the Executive, and its decisions in matters of administration have the force of judgments of the Supreme Court; but whenever questions of law become involved, a case may be submitted to the Supreme Court, upon the written request of the parties interested, or by the Land Appeal Court of its own iniatitive. The judgment given in this appeal is final.

Under the Acts at present in force, land may be acquired by the following methods :—(1) By conditional and additional conditional purchase

with residence; (2) by conditional purchase without residence; (3) by the preferent right of purchase attached to conditional leases; (4) by improvement purchases on gold-fields; (5) by auction sales; (6) by after auction sales; (7) by special sales without competition; and (8) by homestead selection.

The maximum area which may be conditionally purchased differs in the eastern and central divisions. In the western division land can only be occupied under lease, or alienated by conditional purchase within special areas, by auction or special sale, or by homestead selection.

Eastern Division.

The conditions for the purchase and occupation of Crown lands are more restricted in the eastern division than in the central and western divisions. Nevertheless, any person above the age of 16 years may, upon any Crown lands not specially exempted, select an area of 40 to 640 acres, together with a lease of contiguous land not exceeding thrice the area of the conditional purchase. The combined area of purchase and lease must not, however, exceed 1,280 acres. The price demanded is £1 per acre, of which 2s. must be deposited when application is made, and the balance, together with interest at the rate of 4 per cent., paid by instalments of 1s. per acre per annum. Payment of instalments commences at the end of the third year, and after the expiry of the period of enforced residence the balance may be paid in one sum at any time. The selector must reside on his selection for a period of ten years, and within three years erect a substantial fence around the land; in some cases, however, other permanent improvements are allowed in lieu of fencing. He is restricted to one selection during his lifetime; but after the expiry of the residential period he may purchase additional areas contiguous to his original purchase up to the maximum area, or he may purchase his conditional leasehold. In such a case, however, he must extend his period of residence, and enclose his additional purchase. Married women judicially separated may select in their own right; and minors taking up lands adjoining the selection of their parents may fulfil the condition of residence under the paternal roof until the age of 21 in the case of males and 24 in that of females.

A conditional leasehold, in conjunction with a selection, may be held for twenty-eight years. The rental is fixed by the Land Board. The leasehold must be enclosed within three years; one fence, however, may enclose both the conditional purchase and the lease. A lease may at any time be converted into a purchase. The term of residence on the conditional purchase and leasehold must aggregate ten years from the date of application.

When land is conditionally purchased without residence, the maximum area is limited to 320 acres, and no conditional lease is granted. The selection must be enclosed within twelve months after survey, and within five years additional improvements must be made to the value of £1 per acre. The price demanded is £2 per acre, and the

deposit and instalments payable are twice as high as those required in the case of an ordinary conditional purchase. No person under 21 years of age may select land on non-residential conditions; and anyone who takes advantage of the provisions permitting the acquirement of a conditional purchase without residence is not allowed to make any other conditional purchase.

Special areas may be thrown open to selection under special conditions. The price is not less than £1 10s. per acre, and the maximum area which may be taken up is 320 acres. Non-resident selectors are charged double the rates payable by those who reside on the land.

Central Division.

In the central division land may be conditionally purchased on terms as to residence, fencing, improvements, price, and mode of payment similar to those which govern selection in the eastern division. The maximum area which may be selected is 2,560 acres, and a conditional lease in the proportion granted in the eastern division may be secured, but the aggregate area of both selection and lease must not exceed 2,560 acres. The area which may be purchased without residence, and the conditions in regard thereto, are the same as in the eastern division. Within special areas the maximum extent of a selection has been fixed at 640 acres.

Western Division.

The western division embraces an area of 79,970,000 acres, watered entirely by the Darling River. This part of the colony is essentially devoted to pastoral pursuits. Conditional purchases, except on special areas, are not allowed, but permanent pastoral settlement is encouraged under homestead lease, which may be obtained for a term of twenty-eight years within resumed areas or upon vacant lands. The minimum area obtainable is 2,560 acres, and the maximum, 10,240 acres. A deposit of 1d. per acre must be lodged with the application. The lessee is required to reside upon the land for six months during each of the first five years. The whole area must be fenced in within two years, unless the Land Board allow an exemption in respect of a natural or other boundary. Tenant-right in improvements is secured to the outgoing lessee, who may, during the last year of the term, convert into a homestead selection 640 acres on which his dwelling-house is erected.

Homestead Selection.

Among the special features of the Act of 1895 was the introduction of the principle of classification and measurement of lands prior to selection. Under this system suitable land is set apart and rendered available for the purposes of the selector. The appropriation of areas for homestead selection is another prominent feature of the Act. The tenure of such a selection is freehold, subject to perpetual residence and perpetual rent, and the construction of a dwelling-house at a cost of not less than £20. Six months' rent and part of the survey

fee must be lodged when application is made. Until the grant issues, the rent is fixed at $1\frac{1}{4}$ per cent. on the capital value of the land; afterwards, it is raised to $2\frac{1}{2}$ per cent., and the selection is subject to re-appraisement every ten years. Tenant-right in improvements is secured, and the holding may be so protected that it cannot by any legal procedure, or under any circumstances, be wrested from the selector.

Settlement Leases.

Another departure under the Act referred to is the provision for settlement leases for agricultural and grazing purposes. Under this form of tenancy, lands gazetted in any division as available for settlement lease are obtainable on application, accompanied by a deposit consisting of six months' rent and survey fee. Of agricultural land the maximum area which may thus be taken up is 1,280 acres, and of grazing land, 10,240 acres. The lease is issued for a period of twenty-eight years, and the conditions which attach to it are that the lessee shall reside on the land throughout the term, and fence it in during the first five years. Tenant-right in improvements is secured to the outgoing lessee, who may, during the last year of the term, convert a portion not exceeding 1,280 acres into a homestead selection.

Scrub and Inferior Lands.

The principle of improvement leases secures, in any division, the utilisation of scrub or inferior lands that would otherwise remain unoccupied. The term for which such a lease is issued is twenty-eight years, and the rent is determined according to the circumstances of each case, the object being to secure the profitable occupation of otherwise valueless lands. The maximum area obtainable is 20,480 acres. The outgoing lessee has tenant-right in improvements, and may, during the last year of the term of his lease, convert into a homestead selection 640 acres on which his dwelling-house is erected.

Pastoral and other Leases.

Under the Act of 1884 pastoral leases were surrendered to the Crown, and divided into two equal parts. One of these parts was returned to the lessee under an indefeasible lease for a fixed term of years; the other half, called the resumed area, might be held under an annual occupation license, but was always open to selection—by conditional purchase in the eastern and central divisions, and by homestead lease in the western division. Under the Act of 1895, the tenure of pastoral leases in the western division was fixed at twenty-eight years. In the central division a pastoral lease extends to ten years. In certain cases a further extension ranging up to five years has been secured by virtue of improvements effected; beyond this, however, the Crown has power to further extend the term of the lease for the remainder of a pastoral holding where a portion of such holding has been resumed for the purpose of settlement. Tenant-right

in improvements made with the consent of the Crown is secured to the outgoing lessee. If in the western division he may, during the last year of his lease, convert into a homestead selection 640 acres on which his dwelling-house is erected. When application is made for an occupation license for the expired leasehold area, a license-fee, equal in amount to the sum formerly payable as rent, must be lodged as a deposit.

In addition to pastoral and homestead leases, special leases on favourable terms are granted of scrub lands; snow lands—that is, lands covered with snow during a part of the year; inferior lands; and portions of land required for the protection of artesian wells. Annual leases for pastoral purposes, and residential leases on gold and mineral fields, are also granted; and special leases are allowed in certain cases.

Auction Sales.

Auction sales to the extent of not more than 200,000 acres in any one year are permitted. The upset price is fixed by the Minister for Lands. For town lands it must not be less than £8 per acre; for suburban lands, £2 10s.; and for country lands, £1 5s. Special terms can be made for the purchase of land on gold-fields, and for reclaimed lands.

Labour Settlements.

In the middle of 1893 an Act was passed to establish and regulate labour settlements on Crown Lands, following the example set by New Zealand, and imitated by several other colonies. Under this Act the Minister may set apart certain areas for the purpose of establishing labour settlements. A settlement is placed under the control of a Board, which enrols such persons as it may think fit to become members of the settlement; makes regulations concerning the work to be done; apportions the work among the members; and equitably distributes wages, profits, and emoluments after providing for the cost of the maintenance of the members. Any trade or industry may be established by the Board, and the profits apportioned among the enrolled members. A Board is constituted as a corporate body, with perpetual succession and a common seal; and the land is leased to the Board as such, in trust for the members of the settlement, for a period of twenty-eight years, with right of renewal for a like term.

When a Board has enrolled such a number of persons as the Minister for Lands may approve, it may apply for monetary assistance on behalf of the members of the settlement. The Minister has power to grant an amount not exceeding £25 for each enrolled member who is the head of a family dependent upon him; £20 for each married person without a family; and £15 for each unmarried person. On the expiration of four years from the commencement of the lease, and at the end of each year following, 8 per cent. of the total sum paid to the Board becomes a charge on its revenues, until the total amount advanced, with interest at the rate of 4 per cent. per annum, has been repaid.

Victoria.

During the earlier period of the colonisation of Victoria, then known as the District of Port Phillip, in New South Wales, the alienation of Crown lands was regulated by the Orders in Council of the mother colony, to which reference has already been made. In the year 1840, however, the upset price of country lands, which in New South Wales was limited to 12s. per acre, was specially raised to 20s. in the District of Port Phillip. The Orders in Council continued in force until 1860, when the system of free selection of surveyed country lands was inaugurated, the uniform upset price being fixed at £1 per acre. No condition was required to be fulfilled by the selector other than that of making a cash payment for the whole of his purchase—or for one-half only, the other half being occupied at a yearly rental of 1s. per acre, with right of purchase at the original price. In 1862 a new Act was passed. Large agricultural areas were proclaimed, within which land could be selected at a uniform price of £1 per acre. Modifications were introduced in the mode of payment; the maximum area which could be selected by one person was limited to 640 acres; and it was stipulated that certain improvements should be effected or part of the land placed in cultivation. This Act was amended in 1865, when the principle was introduced of leasing Crown lands within agricultural areas, with right of purchase after the fulfilment of certain conditions as to residence and improvements; and a new provision was added to meet the demand for land adjacent to gold-fields.

The legislation in force was, however, superseded by the Land Act of 1869 and the Pastoral Act of the same year. Until that time the free selection system in the colony had been limited to certain lands proclaimed within agricultural areas, and to allotments previously surveyed, thus avoiding the conflict which was then beginning to take place in New South Wales between the selector and the pastoralist. Under pressure of a sudden increase in the demand for land, arising from the enormous immigration into Victoria which had followed the discovery of gold, and the necessity for the people finding other means of employment, and other and more permanent sources of income, the Victorian Legislature adopted the system in vogue in the neighbouring colony, with modifications to suit the local conditions. The Act of 1869, which was amended in 1878, expired by effluxion of time in 1884, when a new Land Act was passed, the main tendency of which was to restrict the further alienation of the public estate by limiting the area which might be sold by auction, and substituting for the existing method of selecting agricultural land a system of leasing in certain defined areas, and at the same time conserving to the lessee the privilege of acquiring from his leasehold the fee-simple of 320 acres under the system of deferred payments. A portion of the public domain, known as the "Mallee Scrub," comprising some 11½ million acres wholly or partly covered with various species of stunted trees, was separately dealt with by the Mallee Pastoral

Leases Act of 1883. The land legislation of 1884 and the special enactment just referred to were again modified by the Acts of 1890, 1891, 1893, and 1896.

Unalienated Crown lands are divided into the following classes:—Pastoral lands; agricultural and grazing lands; auriferous lands; lands which may be sold by auction; swamp lands; state forests; and timber and water reserves. Land may be acquired in the following manner:—(1) By selection of pastoral lands as homesteads at £1 per acre unless the land should be exempted from such selection by terms of the lease; (2) by agricultural allotments of agricultural and grazing lands upon payment of 14s. per acre; (3) by selection of lands within auriferous areas which are considered no longer profitable to work for gold within 50 feet of the surface, at an appraised value of not less than £1 per acre; (4) by purchase at auction of town or country lands within specified areas—the former at a price determined in the proclamation of the sale, and the latter at £1 per acre; (5) by selection of an agricultural allotment in the mallee country or on the mallee border on perpetual lease, at a rental to be fixed by the Land Board.

Pastoral Lands.

Pastoral lands cannot be alienated in fee; they are only obtainable on lease, expiring not later than December 29, 1898, and are subdivided into allotments varying in size from 7,500 to 40,000 acres. No lessee may hold more than one allotment. The lease is granted to the first applicant; but should more than one person make application on the same day, it is put up to auction. Should no bid be offered the lease may be subdivided, and so put up to sale. The rent is computed at the rate of 1s. per head of sheep and 5s. per head of cattle, the number of sheep and cattle being determined by the grazing capabilities of the land. A pastoral lessee must pay rent in advance every six months; he cannot assign, subdivide, or sublet the lease without the consent of the Board of Lands and Works; he must destroy all vermin and noxious growths, and keep in good condition and repair all fences, tanks, dams, and other improvements; and he must not destroy growing timber, except for fencing purposes or for building on the land. The incoming tenant pays the outgoing lessee for all permanent improvements which the latter may have effected. Upon compliance with all the conditions, the lessee may select 320 acres in one block for a homestead, at £1 per acre, unless the terms of his lease debar him from selecting upon the land.

Agricultural and Grazing Lands.

Agricultural and grazing lands are leased in "grazing areas," not exceeding 1,000 acres in extent, for a term of not more than fourteen years. On the expiry of the lease the land reverts to the Crown, and allowance is made for improvements. Two or more grazing areas may be held by the same person provided the total area does not exceed 1,000 acres. The holder of a grazing lease is subject to the same

conditions as the pastoral lessee, but he must enclose his land with a substantial fence within three years. The lessee may select out of his leased land an "agricultural allotment," not exceeding 320 acres in extent; or should he have selected under previous Acts, he may increase his grazing area to 1,000 acres and his agricultural allotment to 320 acres. The rent is fixed at 2d. to 4d. per acre for agricultural areas, on an assessment by the Local Board, with the addition of 5 per cent. on the assessed capital value of any permanent improvements that may be on the land. The area of an agricultural allotment is excised from the grazing lease, and a license to occupy the allotment is granted to the selector. The license for an agricultural allotment is issued for a period of six years, at a rental of 1s. per acre per annum, payable half-yearly in advance; and it is not transferable. The licensee must destroy all vermin, and within six years enclose his land and effect improvements to the value of £1 per acre. He is also required to reside on the land for five years. When these conditions have been complied with, he may receive a Crown grant upon payment of 14s. per acre; or he can obtain a lease for fourteen years at 1s. per acre per annum, and at the end of that term his Crown grant. Non-residential licenses are granted upon payment of twice the ordinary license fee and other charges; but the area granted under such licenses must not exceed 50,000 acres in the whole colony during any one year. For the purpose of establishing and cultivating hop-gardens, vineyards, or orchards, selectors may obtain a grant of part of their allotments, not exceeding 20 acres, when so planted, upon defraying the difference between the amount of rent actually paid and the amount of purchase money.

Lands within Auriferous Areas.

Licenses to reside on or cultivate lands comprised within an auriferous area may be granted for a period not exceeding one year. The area covered by a license cannot exceed 20 acres. Lands classified as auriferous cannot be alienated; but they may be obtained under grazing license for a period of five years, renewable for a similar term, subject to the right of any person to enter upon the land for the purpose of mining. Auriferous lands which are considered to be no longer profitable to work for gold within 50 feet of the surface, may be occupied in allotments, not exceeding 5 acres in extent, for a period of not more than seven years, and may be worked to the above-mentioned depth. The minimum rent payable is 1s. per acre; and while gold-seeking may be prosecuted under the above-mentioned conditions, the surface of the land must be used for the purpose of erecting a residence thereon; for forming a vineyard, orchard, or garden; or for any like purpose. On the expiration of the seven years' lease, the lessee may obtain a grant of the allotment upon payment of an amount fixed by the Local Board; this must not be less than £1 per acre, but allowance is made for the amount paid in license fees up to the date of purchase.

Auction Lands.

Lands comprised within certain areas notified in a schedule attached to the Act of 1891, and lands within proclaimed towns or townships, or within any city, town, or borough proclaimed before the passing of the Lands Act of 1884, may be sold at auction, the upset price for town lands being determined in the proclamation for sale, and that for country lands, £1 per acre. The maximum area that may be sold in any one year is 100,000 acres. Of the price, 25 per cent. must be paid in cash, and the balance in twelve equal quarterly instalments.

Swamp Lands.

The Act of 1891 also contains provisions for the alienation of certain lands designated as "swamp lands," subject to conditions as to their drainage. Likewise, it is provided that Crown lands alienated from the date of the passing of the Act shall be sold, or otherwise alienated, leased, or licensed, only as regards the surface and down to such a depth as may be stated by Order in Council. The sinking of wells is authorised, but the rights to minerals remain with the Crown.

Lands enhanced in Value.

Where Crown lands are enhanced in value by the proximity of a railway, or of waterworks for irrigation purposes, etc., the Governor is empowered to increase the minimum sum per acre for which such lands may be sold, as well as the minimum amount of rent or license fee, by not less than one-eighth nor more than double the sum. But where lands have been sold, leased, or licensed at an enhanced price, and the works by reason of which the extra payment has been demanded have not been constructed within ten years from the date of the Order in Council fixing the enhanced price, the additional sum paid must be returned.

Forest Lands.

Land situated within the State forests, and timber and water reserves, cannot be alienated; and the administration of the Forest Domain of the Crown is placed in the hands of local Forest Boards, which are empowered to receive fees for licenses to cut or remove timber.

Mallee Scrub.

Lands situated in the north-western district of the colony, over which the mallee scrub extends, are the subject of a special enactment designated the "Mallee Pastoral Act of 1883," which was amended in 1885 and partly recast under the present Land Act of 1890, and further amended in February, 1896. Under the law in force the mallee country is divided into two parts, namely, the mallee border, extending along the southern margin of the mallee country; and the mallee blocks, situated to the north of the border, and extending to the banks of the Murray River. In the mallee border the land is parcelled out in

"mallee allotments," the maximum area of which is 20,000 acres. These allotments may be leased for terms expiring not later than the 1st December, 1903.

No assignment of the lease of a mallee allotment by operation of law can take effect without the consent of the Board, and the lessee without such consent cannot execute any mortgage or lien thereon. The lessee is required, within six months of the granting of the lease, to take up his residence on the land or within 5 miles thereof, and to remain there for at least six months in the first year, and nine months during each of the next four years; or, instead, to cultivate at least one-fourth of the allotment within two years, and at least one-half before the end of the fourth year. In the event of the insolvency or death of the lessee, residence is not obligatory on the assignee, executor, or administrator. Without the consent of the Board, the lessee cannot clear or cultivate any part of his allotment, and not more than five crops in succession may be raised, after which for one year the land must be allowed to lie fallow. The rent is fixed at 3d. per acre per annum.

It is provided that the lessee may select out of his mallee allotment an agricultural allotment not exceeding 640 acres, either under license or perpetual lease. When this is done the remainder of the mallee allotment may be resumed, compensation being awarded for improvements only. Should the lessee have actually resided on the land and destroyed the vermin thereon, the period of six years for which the agricultural allotment license is issued may be so shortened as not to exceed the length of such residence, conditionally on the payment of the license fees.

The "mallee blocks" are of various sizes. One portion of a block may be held for five years under an occupation license, and the other under lease for a period expiring not later than the 1st December, 1903. The lease is granted for a period of twenty years. For the first five years the rent payable is at the rate of 2d. per head of sheep and 1s. per head of cattle depastured on the land; for the second five years twice this amount; and for the remainder of the term at an additional increase equal to one-half the amount payable during the second period of five years; but in no case may the yearly rent be less than 2s. 6d. for each square mile or part of a square mile of land. The lessee cannot assign, subdivide, or cultivate any part without the consent of the Board of Land and Works; he must destroy the vermin upon the land, and fulfil certain other conditions. The Government retain the right of resuming the land after giving due notice, compensation for improvements effected being given on assessment.

An agricultural allotment license or perpetual lease of forfeited, resumed, or expired mallee blocks may be granted to any person who is not the licensee, lessee, or owner of an agricultural allotment in the mallee country or on the mallee border. The area must not exceed 640 acres. In the case of a perpetual lease, the payment of the yearly rent is made in advance. The lessee must at once commence to

destroy any vermin which may be on the land, and within two years have made a complete clearance of such pests, and during the remainder of his lease he must see that the land is kept free from them. He is also required to enclose the land within six years from the issue of the lease. The power of resumption, subject to compensation and the right to remove improvements, is reserved under certain conditions. The rent is not to exceed 2d. per acre per annum to the 31st December, 1903, and thereafter to be as the Board may determine. The lease may be transferred, provided there are no arrears of rent.

No person can select or become the licensee, lessee, or perpetual lessee of more than 640 acres as an agricultural allotment or allotments in the mallee country or on the mallee border, and such allotment or allotments must be situated at a distance of at least 3 miles from the Murray River. The licensee of an agricultural allotment may give a license lien on all improvements on the land; but this must be registered in the Crown Lands Office, and a memorandum of the same endorsed by the Registrar of Titles on the grant or lease as an encumbrance thereon. In the event of the forfeiture of the license, the holder of a license lien has neither legal nor equitable claim against the Crown.

Vermin Districts.

Under the Land Act of 1890 districts which are proclaimed as vermin infested are, for the purpose of securing the extinction of these animal pests, administered by local committees appointed by the owners, lessees, and occupiers of the lands. In order to secure the erection of vermin-proof wire-fencing a fencing rate may be levied, and the Minister has power to deduct 5 per cent. of the amount levied in vermin districts for the purpose of erecting a vermin-proof fence between the mallee country and the mallee border.

Wattle Cultivation.

During 1890 legislation was enacted having for its object the granting of leases of any unoccupied Crown lands for the cultivation of wattle-trees, for any term not exceeding twenty-one years, at a rent of 2d. per acre per annum for the first seven years, 4d. per acre for the second seven years, and 6d. per acre for the remainder of the term. A lease is not granted for more than 1,000 acres; and the rent is payable half-yearly in advance. The lessee covenants not to assign, sublet, or divide the lease without the consent of the Board of Land and Works; to keep all improvements in repair during each of the first six years following the year after the granting of the lease; to sow or plant wattle-trees or any other approved tannin-producing trees or plants on at least one-fifth of the land leased, and within six years to occupy the whole area in a similar manner. He must within two years enclose a third, within three years two-thirds, and within four years the whole of the land leased; and he is required to keep the fence in good repair, and to destroy all vermin which may be upon the land. The lessee may select

out of his lease not more than 320 acres, and he may acquire the freehold in the same in like manner and subject to the same conditions as those governing agricultural allotments.

Village Settlements.

Under the Settlement on Lands Act of 1893 there may be set apart and appropriated for the purposes of village communities any lands not alienated from the Crown, and not being auriferous or permanently reserved for any purpose. Such lands are surveyed into allotments of 1 to 20 acres each, according to the quality of the soil and the situation. Subject to certain restrictions, any person of the age of 18 years may obtain a permit to occupy a village community allotment for a period not exceeding three years. The rent is merely nominal, but conditions are laid down with the object of ensuring *bona-fide* occupancy. On the expiration of the permit a lease may be obtained, provided the conditions of the permissive occupancy have been fulfilled. The lease is granted for a period of twenty years. The lessee must pay in advance, every half-year, rent equal to one-fortieth of what is regarded as the price of the allotment, which is to be not less than £1 per acre. Within two years from the date of the lease he must have brought into cultivation not less than one-tenth, and within four years, one-fifth of the land; and within six years, have effected substantial improvements of a permanent character to the value of £1 for every acre leased. He must also keep all improvements in good repair; and he cannot assign, transfer, or sublet the land, or borrow money on the security of his lease without the consent of the Board of Land and Works. He must reside personally on the land, and use it for agriculture, gardening, grazing, or other like purpose.

Homestead Associations.

Areas of similar lands to the foregoing may also be set apart and appropriated for occupation by members of associations or societies; but no proclamation can remain in force for a longer period than three years in the case of a society, nor for more than six months in the case of an association, after the survey and subdivision of the block; and land in any block not occupied or leased at the expiration of these periods becomes unoccupied Crown land again. No block of land set apart for the purposes of associations or societies can exceed in area 2,000 acres. A block is subdivided into lots of not more than 50 acres each, and the number of persons to be located in each block must not be less than one for every 50 acres of its total area. A permissive occupancy of a section may be granted to any member of an association or a society for a period of three years. The rent is a nominal one, and after proof of fulfilment of conditions a lease may be obtained by the member, provided he is of the age of 18 years. The lessee covenants to pay the annual rent and the cost of survey; to repay all moneys advanced by the Board; to bring

into cultivation within two years not less than one-tenth, and within four years not less than one-fifth of the land; and within six years to effect substantial improvements of a permanent character to the value of £1 for every acre leased. He must also keep the improvements in good repair; and he cannot assign, transfer, or sublet the land, or borrow money upon it without the consent of the Board of Land and Works. He must personally reside on his section or its appurtenant township allotment, and use the land for agriculture, gardening, grazing, dairying, or other like purpose. Adjoining to or within every block of land appropriated in this manner, an area of not more than 100 acres may be set apart for the purposes of a township, and the Board of Land and Works may subdivide it into allotments not exceeding one acre, in order to provide a township allotment for each homestead selection. Power is reserved to alienate the fee-simple of those allotments not required for the purpose; and every settler may, within one year from the commencement of his permit or lease, obtain a lease of such an allotment, with the right to a Crown grant in fee on making the payment prescribed.

Labour Colonies.

Areas of similar land, not exceeding 1,500 acres in extent, may also be set apart for the purpose of labour colonies, to be vested in five trustees, appointed by the Governor. For the purpose of aiding the trustees, provision is made whereby persons subscribing to the funds of such a colony may annually elect a committee of management, consisting of four members. The joint body (trustees and committee) is empowered, on a day to be determined in each case by the Minister, to admit to such a colony any person who shall be entitled to such benefits as the rules of the colony may prescribe. The trustees and committee of each colony must establish and conduct the same; and they have all the powers and authority necessary to enable them to improve the position of the colony and make it self-supporting. They may establish and maintain any industry they please, and dispose of the proceeds thereof. A subsidy of £2 for every £1 received by the trustees and committee from public and private subscriptions is payable by the Government. The moneys received are to be disbursed in the payment of allowances for work to persons employed in the colony; in the construction and maintenance of necessary buildings; and in purchasing provisions, clothing, building materials, stock, seed, and agricultural implements.

Besides the foregoing provisions, there are numerous others, dealing with minor interests, which in a general statement of this kind it is not necessary to recapitulate.

Prospective Legislation.

The exodus of the agricultural population of Victoria to the adjacent colonies, and more particularly to New South Wales, attributed amongst other causes to the more liberal terms attached to the alienation of land,

has ultimately forced the Government to submit for consideration of Parliament a measure more in consonance with the legislation of the other provinces. The measure, which is at present under the consideration of the Legislature, provides for the classification by a competent Board of the land that remains available for settlement, the area of which is estimated at between 17 and 18 millions of acres. It is proposed that the available land shall be divided into the following classes: — (1.) Good agricultural or grazing lands (dense scrub and heavily timbered); (2.) Other good agricultural or grazing lands (open or lightly timbered); (3.) Agricultural or grazing lands; (4.) Grazing lands; (5.) Pastoral lands; (6.) Swamp or reclaimed lands; (7.) Lands which may be sold by auction (not including swamp or reclaimed lands); (8.) Auriferous lands; (9.) State Forest Reserves; (10.) Timber Reserves; (11.) Water Reserves. The heavily-timbered agricultural land comprises elevated areas at Cape Otway, in South Gippsland, and on the Upper Bass River, costly to clear, but very prolific when cleared. The grazing lands are mainly in the Benambra, Delatite, Bogong, North Eastern, Eastern Gippsland, Anglesey, Dalhousie, Borung, and Normanby Districts.

Agricultural allotments may be selected from the first, second, and third class lands. The area is restricted to 200 acres in the first and second classes, but 320 acres may be taken up in the third class, at a uniform price of £1 per acre. On the first and second class lands, grazing allotments may be granted of a maximum area of 200 acres; and on the third, fourth, and fifth class lands to the extent of 640 acres, out of which 320 acres may be selected in the third, 420 acres in the fourth, and the whole in the fifth class.

In respect to grazing leases, it is proposed to extend the period of tenure to the close of the year 1899, in order to give an opportunity of reviewing their position to holders of leases of that class. The right of the present lessees of land in the first class to select an area of 320 acres is preserved to the 31st December, 1899; but for the future the area is to be limited to 200 acres, and if a lessee does not intend to select, he may obtain a lease of that area for twenty-one years. In the second class, existing rights are preserved to the end of 1899, and the lessee may select 320 acres, and surrender the balance of the lease to four children, who must be at least 18 years of age. The right to select a grazing allotment of 640 acres of land in the third class is continued to the date mentioned, and in the event of the lessee having already selected less than the maximum area he may apply for a grazing lease to make up such area, or surrender in favour of a child of the stipulated age. A lessee of land in the fourth class may apply for a grazing allotment of 640 acres, at a price of 10s. an acre, before the expiration of his lease, or take up the land as a perpetual lease at 1½ per cent. on 10s. an acre; or he may select a part and apply for the balance as a lease. He may also select a part and surrender the balance in favour of a child of the required age, or apply for a new lease for a period of twenty-one

years. New grazing area leases are to have a currency of twenty-one years; but the areas of first and second class lands are restricted to 200 acres, third class lands to 640 acres, and fourth class lands to 1,280 acres; out of which 200 acres may be selected in the first and second classes, 320 acres in the third class, and 640 acres in the fourth class. The principle of a minimum rent is retained; but that of a maximum is to be abolished, because it is recognised that lands of a superior class may be held at a nominal rental.

The term of pastoral leases is extended for a further period of twelve months, and where the land is not superior to the fourth class an area of 640 acres may be selected. There is to be no renewal of existing leases, and on their termination the land is to be let by auction for a period of ten years, while the minimum area is reduced to 1,280 acres and the right of selection limited to areas ranging from 200 to 640 acres.

It is proposed to allow future agricultural licensees to select an area of 200 acres of first and second class lands combined, or 320 acres of second class land, for a term of forty years, at a rental of 6d. per acre. Licensees must improve the land to the extent of £1 an acre, and may convert to twenty years' terms, or obtain a perpetual lease at a rental of $1\frac{1}{4}$ per cent. on £1 an acre.

The existing law in respect of perpetual leases is extended and made more liberal than that in force relating to selection under agricultural leases and licenses. The area which may be selected is limited to 640 acres in the first and second classes, 960 acres in the third class, and 1,920 acres in the fourth class, and the rent is to be determined by the Board every ten years and based on $1\frac{1}{4}$ per cent. of the freehold value of the land without improvements. Lessees must reside on or within 5 miles of the land for six months in the first year, and eight months in each of the succeeding years from the second to the fifth year, and cultivate at least one-fourth in the first two years, and one-half before the end of the fourth year. Improvements up to 10s. an acre are to be made before the end of the third year, and to the extent of another 10s. an acre by the sixth year.

Provided no objection is made on the ground that the land is auriferous, it is proposed to allow licensees of lands within auriferous areas to purchase their properties after having been in possession for two and a half years; the term of the license is also extended to twenty-one years.

It is proposed to have a valuation of swamp lands, and their occupation is to be permitted either in areas not exceeding 160 acres for a period of twenty-one years, or under perpetual lease, or under conditional purchase lease, or by auction. The lessee is required to effect improvements to the value of 10s. an acre, and to keep open all canals, ditches, etc.; the rent for perpetual leases to be 4 per cent. on the value of the land till 1919, after which year the Board is to determine the charge.

Mallee land is to be classified by the Board, and divided into land of the unimproved value of not less than £1 per acre, and that of not less than 10s. an acre. Rents are to be made uniform, and restrictions are placed on the destruction of certain kinds of timber.

Authority is sought with the object generally of providing a simple method of securing homesteads for the benefit of settlers by a form of registration which would protect any homestead valued up to £1,000.

QUEENSLAND.

The land legislation of New South Wales in force on the date when the Moreton Bay District was formed into the colony of Queensland, gave place soon after that event to a new system of settlement, better adapted to the requirements of the newly constituted province. Following to a certain extent the lines adopted by their neighbours, the Queensland legislators introduced into their regulations the principle of free selection before survey, and of sales under the deferred payment system. Having to dispose of a vast territory which, not being endowed with so temperate a climate, had not the same attractions as the southern provinces, it was considered necessary to exercise greater liberality in offering the land than was shown to settlers in the other colonies. Large areas and small prices were therefore features of Queensland land sales. Most liberal, also, were the provisions to facilitate the exploration and occupation for pastoral purposes of the vast interior country, and the Pastoral Act of 1869 led to the occupation by an energetic race of pioneers of nearly the whole of the waste lands of the province. The rapid development of the resources of the colony, and the consequent increase of population, necessitated later on a revision of the conditions under which land might be alienated or occupied; but although the tendency has been to curtail the privileges of the pastoralists, the alienation of the public estate by selection—conditional and unconditional—has been placed under enactments of a still more liberal character than those which existed in the earlier days. Under pressure of the new social movement, Queensland has followed in the wake of New Zealand and South Australia, and has granted to the working classes great facilities for acquiring possession of the soil. The regulations at present in force are based upon the legislation enacted under the Crown Lands Act of 1884, and its subsequent amendments in 1886, 1889, 1891, 1893, and 1897.

Land may be acquired in the following manner:—(1) By conditional selection: agricultural homesteads from 160 to 640 acres, at prices ranging from not less than 20s. for 160 acres to less than 15s. per acre for 640 acres, and agricultural selections up to 1,280 acres, at a price determined by the proclamation rendering the land available for settlement—residence in both cases to be personal or by agent; (2) by unconditional selection, at prices one-third greater than those

payable in respect of agricultural selections, the area being limited to 1,280 acres; (3) by grazing-farm selection up to 20,000 acres, the period of lease ranging from fourteen to twenty-eight years at a varying rental, ½d. per acre being the minimum; (4) by scrub selection of areas not exceeding 10,000 acres for a term of thirty years, at rentals ranging from a peppercorn to 1d. per acre; and (5) by purchase at auction, of town lands at an upset price of £8 per acre, suburban lands at £2 per acre, and country lands at £1 per acre for land classed as agricultural, and 10s. per acre for any other.

The colony is, as far as is necessary, divided into Land Agents' Districts, in each of which there are a Public Lands Office and a Government Land Agent with whom applications for farms must be lodged. Applications must be made in the prescribed form, and be signed by the applicant, but they may be lodged in the Lands Office by a duly authorised attorney. There is connected with the Survey Department, in Brisbane, an office for the exhibition and sale of maps, and there full information respecting lands available for selection throughout the colony can be obtained on personal application. Plans can also be obtained at the District Offices.

The conditions under which country lands may be acquired for settlement by persons of either sex over 16 years of age—married women excepted, unless they are judicially separated or possess separate estate—are substantially as stated below.

Grazing Farms.

Areas of land already surveyed are available for selection as grazing farms over a great extent of territory within accessible distance of the seaboard. Intending settlers can obtain up to 20,000 acres on lease, for a term of fourteen, twenty-one, or twenty-eight years, at an annual rent varying according to the quality of the land, ½d. an acre being the minimum. This rent is subject to reassessment by the Land Board after the first seven years, and subsequently at intervals of seven years. The applicant must first obtain an occupation license, which is not transferable, and which may be exchanged for a lease for the balance of the term of fourteen, twenty-one, or twenty-eight years as soon as the farm is enclosed with a substantial fence, which must be done within three years. The lease may be transferred or mortgaged after the expiration of five years from the commencement of the lease, and the farm may be subdivided, or, with the consent of the Land Board, sublet. The land must be continuously occupied by the lessee or his agent for the whole term of the lease, and cannot be made freehold. The Commissioner may issue a license to a group of two or more selectors, enabling any one of the selectors to perform the condition of occupation in respect of any of the selections as well as on his own behalf, but the number of selectors personally residing is not at any time to be less than half the whole number interested. One-fifth of the cost of survey, ranging from

something like £30 for a farm of 2,560 acres to about £65 for 20,000 acres—subject to increase or decrease according to locality—must be paid with a year's rent when application is made for the farm, and the balance in equal instalments without interest.

Agricultural Selections.

The more accessible lands near lines of railway, centres of population, and navigable waters, are set apart for agricultural farm selection in areas up to 1,280 acres. The period of license is five years, during which the selector must fence in the land, or expend an equivalent sum in effecting other substantial improvements. As soon as the improvement condition has been complied with, a lease is issued for a term of twenty years from the date of the license, with right of purchase at any time after continuous occupation of the lease for a period of five years. The annual rent is one-fortieth of the purchasing price specified in the proclamation declaring the land open, and varies according to the quality and situation of the land, its natural supply of water, etc. The selector must occupy the land continuously, either in person or by agent, for the whole term of the lease. The cost of survey, ranging from about £10 to £12 for a farm of 160 acres to £20 to £40 for a farm of 1,280 acres, must be borne by the selector.

When land is taken up as an agricultural homestead, the area is restricted to 160 acres, 320 acres, or 640 acres, according as the price specified in the proclamation is determined at not less than 20s., less than 20s. but not less than 15s., or less than 15s. per acre respectively. The selection must be enclosed within a period of five years, or permanent improvements effected at an expenditure dependent on the capital value of the land. The applicant is entitled to a lease for a period of ten years, at a rental of 3d. per acre ; but he may acquire the fee-simple of the land on the terms prescribed in the proclamation, after the expiration of five years from the commencement of the lease.

Two or more selectors of agricultural homesteads may associate for mutual assistance under license from the Land Board. A selector may perform conditions of residence for himself and any other member of the association, provided that at least one-half of the whole number of selectors interested are in actual occupation ; and any sum expended on permanent improvements on any one homestead in excess of the required amount may be credited to any other farm or farms in the group. In other respects the conditions are similar to those governing agricultural homesteads.

Village Settlements.

With regard to village settlement, special provision is made by law for the settlement of little communities, so that settlers may live together in townships for mutual convenience, on allotments not exceeding 1 acre in extent, and with farms of 80 acres in close proximity to their residences. The freehold of these farms may be secured generally on the

same terms as those upon which agricultural farms not exceeding 160 acres in area may be acquired, with the additional privileges that residence on an allotment in the township is held to be equivalent to residence on the farm, and one-fifth of the required improvements may be made on the allotment.

Unconditional Selection.

Areas of land are also available for unconditional selection at prices one-third greater than those payable in respect of agricultural selections. The term of lease is twenty years, and the annual rent one-twentieth of the purchasing price. At any time during the currency of the lease the freehold may be acquired. As the term implies, no other conditions than the payment of the purchase money are attached to this mode of selection—the area allowed to be selected being 1,280 acres. The proportion of cost of survey, on the same scale as for agricultural selection, must be deposited with the first instalment of purchase money at the time of application, the balance to be paid in equal annual instalments.

Scrub Selections.

Lands which are entirely or extensively overgrown with scrub are available for selection in four classes, determined by the extent of scrub. The area selected must not exceed 10,000 acres, and the term of lease is thirty years, the rent ranging from a peppercorn per acre in the first five years, ½d. an acre for the next succeeding ten years, and 1d. per acre for the remaining fifteen years in respect of lands in the first class, to a peppercorn for the first twenty years, and 1d. per acre for the remaining ten years in relation to those of the fourth class. During the period of lease under which the selector pays a peppercorn rent the whole of the scrub must be cleared—a proportionate area in each year—and the land enclosed. Compensation is paid in respect of clearing on any land resumed, but upon determination of the lease the clearing improvements revert to the Crown.

Auction Lands.

The alienation in fee of allotments in towns is restricted to areas ranging from to 1 rood to 1 acre, at an upset price of £8 per acre; while in respect of suburban lands, areas of 1 to 15 acres may be acquired within 1 mile of town lands, and the limit is extended to 10 acres in regard to lands situated over 1 mile from such town lands, the upset price being £2 per acre. In respect of country lands, the maximum area that may be sold in any one year is limited to 150,000 acres, and the upset price is fixed at £1 per acre for land classed as agricultural, and not less than 10s. per acre for any other. A deposit of 20 per cent. is to be paid at time of sale, and the balance, with deed, assurance, and survey fees, within one month thereof.

Immigrants' Land Orders.

To approved persons of European extraction, paying in full their own passages or those of members of their families to Queensland from Europe, the United States of America, or any British possession other than the Australasian colonies, land orders are issued of the value of £20 sterling for each person of 12 years and upwards, and of £10 for each child between 1 and 12 years of age. These land orders are available, for ten years from the date of issue, to their full nominal value, for use by the head of a family in payment of the rent of any agricultural or grazing farm held by him, or by members of his family severally—wife, and children under 18 years of age, of course excepted—in payment of the rent of farms held by them. As the orders are not transferable, and can only be used by residents in the colony, they are of no use to anyone who does not settle on the land and fulfil the conditions as above described.

Co-operative Settlement.

The Co-operative Communities Land Settlement Act of 1893 provides for the setting apart of a portion of Crown lands for the purposes of a group or association of persons for co-operative land settlement, and the condition annexed thereto is that the group shall consist of not less than thirty persons, each of whom is eligible to apply for and hold land under the provisions of the Crown Lands Act of 1884. It is requisite that the group shall be recognised by the Minister, and the rules of the community must be deposited with him. None but natural born or naturalised subjects are eligible to become members of a group, and no person may be a member of more than one community. It is open to a group to register itself under the Friendly Societies Act of 1876, when in such case certain provisions at law dealing with the internal government of the community become inoperative.

The area available for a co-operative community is set apart by proclamation, and cannot exceed in area more than 160 acres for each member. The proclamation specifies and defines the name of the group; the persons included therein; the boundaries and a description of the area; the improvements to be made; the period for which the area is set apart (not exceeding twelve nor less than six years); and the rent payable for the land. A sum equal to at least 2s. 6d. per acre must be expended during each of four equal portions of the lease, and failing that, resumption of the land and consequent dissolution of the group ensue.

No member of a co-operative community possesses an individual interest or property in the improvements effected on the land, the same being vested in the Minister; but on the expiry of the lease, with the conditions satisfactorily performed, the members, on payment of the proclaimed price (if any) and deed and assurance fees, are entitled to a deed of grant in fee-simple of so much land as was specified in the proclamation, the division of the area being left to the members

themselves. In certain cases the acquisition of freehold may be prohibited by the rules of the group, and provision is made for dissolution when the membership falls below a certain number.

Labour Colonies.

Provision is also made for the proclamation of Labour Colonies. The area granted to a colony, which must not exceed 10,000 acres in extent, is vested in five trustees, who are empowered to establish and manage any trade or industry. A subsidy not exceeding £1,000, either conditionally or otherwise, may be granted to a labour colony from Parliamentary appropriations for such purposes.

South Australia.

The settlement of the colony of South Australia was the outcome of an attempt to put into actual practice one of those remarkable theories which logically seem founded upon apparently solid ground, but which are apt to weaken and give way when subjected to the pressure of hard practical facts. The policy by which a wealthy colony was to be created in a few years on the edge of a supposed desert continent, was based upon principles enunciated by Edward Gibbon Wakefield, in a pamphlet published in England about the year 1836. The main idea of his scheme of colonisation was the sale of land in the new possession at a high price, and the application of the amount thus realised to the introduction of immigrants, whom the landowners would at once employ to reclaim the virgin forest, and create wealth and abundance where desolation existed. But although Wakefield had fairly calculated upon the results which would follow the action of man if left to himself, the part which Nature might be expected to play was not taken into consideration, and the scheme quickly proved an empty failure and a distressful speculation for the many whom its apparent feasibility had deluded into investing their means in the lands of the new colony. Had not the discovery of great mineral resources occurred at an opportune time, the exodus into the eastern colonies of the immigrants imported or attracted to South Australia would have emptied the province of its population, and considerably retarded the progress of a territory not inferior in natural resources to other portions of the Australian continent.

Steps were soon taken to modify the Wakefield system, but it was only in 1872 that an Act was passed more in conformity with the legislation of the neighbouring colonies, and giving to the poorer classes of the population a chance to settle upon the lands of the Crown under fair conditions. The Lands Act of 1872, adapted as it was to the needs of the time, gave way to other measures, and the regulations now in force are those of the Crown Lands Act of 1888, as amended in 1889, 1890, 1893, 1894, and 1895.

General Provisions.

The law as it now stands gives power to the Government to alienate Crown lands in the following manner:—(1) By auction, town lands, Crown lands within hundreds, and special blocks may be alienated, but no sales of country lands may be made at a price of less than 5s. per acre; a deposit of 20 per cent. is required at time of sale, the residue to be paid within one month therefrom; (2) by lease with right of purchase, the period of lease being twenty-one years, with option of renewal for a further period of twenty-one years, and right of purchase exercisable at any time after the expiration of the first six years of the term, at a price of not less than 5s. per acre. The grant in fee-simple of any land cannot be construed to convey any property in any mineral or mineral oil in or upon the land, the same being reserved by the Crown, although authority may be given to persons at any time to search for and remove any of the minerals reserved.

Leases with Right of Purchase.

No lands may be leased unless they have been surveyed; and the area that a lessee may at any one time hold with a right of purchase is restricted to 1,000 acres. No lease with right of purchase, or perpetual lease, can be granted of lands of such value that the purchase money will exceed £5,000 unimproved value. The Land Boards are entrusted with the duty of classifying lands, and of fixing the area of blocks, the price and annual rent at which each block may be taken up on lease with right of purchase, and the annual rent at which such block may be taken up on perpetual lease. Applications must be made in writing to the Commissioner, and must cover a deposit equal to 20 per cent. of the first year's rent of the block which it is desired to take up. All applications are dealt with by the Land Board, which has power to subdivide or to alter the boundaries of blocks, and to decide what price or annual rent shall be payable. A lessee must execute his lease and pay the balance of the first year's assessment and prescribed fees within twenty-eight days after the acceptance of his application has been notified and the lease has issued, otherwise he forfeits the deposit paid and all rights to a lease of the land.

Leases with right of purchase are granted for a term of twenty-one years, with the right of renewal for a similar term. Purchase may be made at any time after the first six years. The price must not be less than 5s. an acre.

The rent chargeable on a perpetual lease for the first fourteen years is fixed by the Land Board and notified in the *Government Gazette*, and for every subsequent period of fourteen years a revaluation is made. Every lease contains a reservation to the Crown of all minerals, timber, and mineral oils in or upon the land. The lessee undertakes to fulfil the following conditions:—(1) To pay rent annually; (2) to pay all taxes and other impositions; (3) to fence in the land within the first

five years, and thereafter to keep the fences in repair; (4) to forthwith commence to destroy and to keep the land free from vermin; (5) to keep in good order and repair all improvements which are the property of the Crown; (6) to keep insured to their full value all buildings which are the property of the Crown; and (7) to give access to the land to persons holding mining licenses or mineral leases.

Sale of Lands.

All Crown lands within hundreds which have been offered for lease and not taken up, may be offered for sale at auction for cash within two years of the date on which they were first offered for lease. Other lands may be sold at auction for cash, and not upon credit or by private contract, the Commissioners fixing the upset price of both town and country lots offered; but no country lands may be sold for less than 5s. per acre.

Pastoral Leases.

Pastoral lands are divided into three classes, and the administration is controlled by a Pastoral Board. Class A includes all pastoral lands within District A; Class B includes similar land in District B, the boundaries of which are set out in the Schedule to the Pastoral Act of 1893; and Class C includes all pastoral lands to the south of the 26th parallel of south latitude, and not included in Classes A and B. Leases in Classes A and B have a currency of 21 years, and in Class C of 21 years, with a right of renewal for a similar term at a revaluation.

No mining by the lessee is allowed, but he may use the surface of the land for any purpose, whether pastoral or not. Improvements are valued solely in connection with their worth to the incoming lessee, and may in no case exceed in value such as are necessary for the working of a run of 5,000 sheep in Class A, of 10,000 sheep in Class B, or of 30,000 sheep in Class C, or a proportionate number of cattle, five sheep being taken as the equivalent of one head of cattle. Revaluations may be made during the currency of a lease if, by the construction of Government works in the neighbourhood, such as railways and waterworks, the land should have received an enhanced value. Leases are granted to discoverers of pastoral lands, or to any person for inferior lands, for forty-two years—the first five years at a peppercorn rental; the next five years at 1s. per annum per square mile; and the remainder of the term at 2s. 6d. per annum per square mile. For all other leases the minimum rent is fixed at 2s. 6d. per annum per square mile, together with 2d. for each sheep depastured in Classes A and B, and 1d. for each sheep in Class C. Provision is made for the resumption of leases and the granting of compensation. All disputed cases are decided according to the terms of the Arbitration Act, 1891.

In cases where the area held by an outgoing lessee is reduced by subdivision below a certain minimum, the improvements are to be valued for the protection of such lessee as if the area were of the minimum carrying capacity, and any difference between their value and

that paid by the incoming lessee is to be borne by the Commissioner. The Commissioner is not bound to recover improvement moneys or to protect improvements, and any moneys paid to an incoming lessee for depreciation of improvements are to be laid out in their repair; but a lessee may be released from the liability to repair improvements provided others in lieu thereof are made to the satisfaction of the Commissioner.

The lessee covenants to stock the land, before the end of the third year, with sheep, in the proportion of at least five head, or with cattle, in the proportion of at least one head, for every square mile leased; and before the end of the seventh year to increase the stock to at least twenty sheep or four head of cattle per square mile, and to maintain the numbers at that rate.

In cases where the Commissioner is satisfied that the country is waterless or infested with vermin, the covenant relating to stocking the land may be qualified, provided that a sum equal to £5 per square mile of the leased land has been expended in the destruction of vermin or in the construction of water improvements. Where artesian water yielding not less than 5,000 gallons per diem is discovered, the lessee is entitled to a remission of five years' future rent in respect of an area of 100 square miles surrounding such well, but this concession cannot be claimed on account of more than four wells on any one run.

Forfeiture of a lease does not take effect until after three months' notice has been given to the lessee, who may thereupon apply for relief to the Tenants' Relief Board, which consists of a Judge of the Supreme Court assisted by two assessors. After consideration of all matters affecting the question, the Board may determine as they think fit.

Working-men's Leases.

A new feature has been introduced into the land legislation of the colony, in response to the claims of the working classes. It is enacted that certain lands of the province may be surveyed into blocks not exceeding 20 acres in area, and leased under the conditions affecting leases granted with the right of purchase and perpetual leases. No one except a person who gains his livelihood by his own labour, and who has attained the age of 18 years, is entitled to a working-man's lease. The rent is payable annually in advance. The lessee is bound to reside on the land for at least nine months in every year, but residence by his wife or any member of his family is held as a fulfilment of the residential condition. Working men's leases situated within a radius of 10 miles from the Post Office, Adelaide, cannot be taken up with the right of purchase.

Exchange of Lands.

Crown lands may be exchanged for any other lands, notwithstanding the existence of any lease that may have been issued in connection with the former. The Crown lands proposed to be given in exchange may be granted in fee simple or under perpetual lease.

Village Settlements.

Twenty or more persons of the age of eighteen and upwards may form an association for the purpose of founding a village settlement. The memorandum, on approval of the Commissioner, is deemed to be registered, and the association becomes a corporate body, with the right to sue and to be sued. The proclamation sets forth the name, situation, and boundaries of the village; the names of the villagers and of the trustees of the association; the maximum area to be allotted to each villager; and the nature and aggregate value of the improvements to be made on the land, and the period within which they are to be effected. Within two months of the publication of the proclamation constituting a village, the Commissioner is to issue to the association a perpetual lease thereof. The conditions attached are that, after the first six months from the date of issue of the lease, at least one-half of the villagers shall reside upon and utilise the land in the manner prescribed; that during each of the first ten years the sum of 2s. per acre at least shall be expended in improvements, which are to be kept in good repair; and that the lands are not to be sub-let. The Commissioner may make advances to registered associations, to the extent of £100 for each villager, for the purchase of tools or to effect improvements, such advances to be repaid in ten equal yearly instalments, with interest at the rate of 5 per cent. per annum. Power is vested in the Commissioner to expel from an association any villager who has become liable to expulsion under the rules; to control and direct the expenditure of any money advanced; to call upon a trustee to resign where the welfare of the association calls for such action; and to require an association to increase the number of villagers so that it may not be less than the number who signed the rules when first registered—the total to be not more than 500.

Registration of Homesteads.

The Homestead Act of 1895 has for its object a simple method of securely settling homesteads for the benefit of settlers and their families. It is essential that applicants for the registration of their homesteads should be residing, and have resided for at least one year prior to making the application, on the land to be registered. Homesteads with improvements thereon of the value of more than £1,000, or in respect of which the applicant is not either the owner of an unencumbered estate in fee-simple or the holder of a perpetual lease from the Crown, are not eligible for registration. The effect of registration is to settle the homestead for the benefit of the settler and family until the period of distribution, either under his will, or when his children have all attained the age of 21 years. No alienation or attempted alienation by the settler or his family has any force or effect other than as provided for, and their interest continues unaffected to the value of £1,000 only. Provision is made for the leasing of the

homestead, but for no period longer than three years. Registration may be rescinded should the settler become bankrupt or make an assignment for the benefit of his creditors within twelve months from the date of registration; and a similar course may be adopted in the event of his death within a like period and it should be shown that the estate is insufficient for the payment of his debts and liabilities without recourse to the homestead. The Act applies to land brought under the provisions of the Real Property Act of 1886, as well as to land not subject to that Act.

Mining Areas.

Provision is made for the issue of business and occupation licenses. Business claims cannot be more than ¼ acre in townships nor more than 1 acre on other lands, and they must not be situated within 5 miles of any Government township, except they come within a gold-field. The cost of a business license is 10s. for six months or £1 for a year. Occupation licenses of blocks not exceeding ½ acre are granted for a period of fourteen years, at an annual rental of 2s. or less.

The Northern Territory.

The Northern Territory of South Australia includes the whole of the lands situated to the north of the 26th degree of south latitude, bounded by Queensland on the east, Western Australia on the west, and the Ocean on the north. This portion of the Continent is under the administration of a Resident, appointed by the Government of South Australia; and the alienation and occupation of lands within the Territory are conducted under regulations enacted by the South Australian Legislature, in accordance with the Northern Territory Crown Lands Consolidation Act of 1882.

It is provided that lands may be purchased for cash, without conditions, in blocks not exceeding 1,280 acres, for 12s. 6d. per acre. They may also be bought under the deferred payment system to the same maximum area, and at the same price, payable in ten years, together with an annual rent of 6d. per acre.

Leases for pastoral occupation may be issued for a term not exceeding twenty-five years, for blocks up to 400 square miles, the annual rental for the first seven years being 6d. per square mile, while 2s. 6d. per square mile is charged during the remainder of the term.

In order to encourage the cultivation of tropical produce, such as rice, sugar, coffee, tea, indigo, cotton, tobacco, etc., special provisions have been enacted. Blocks of 320 acres to 1,280 acres may be let for such purposes at the rate of 6d. per acre per annum. If, on the expiration of five years, the lessee can prove that he had cultivated one-fifth of his area by the end of the second year, and one-half by the end of the fifth year, he is relieved from all further payment of rent, and the amount already so paid is credited to him towards the purchase of the land in fee.

Western Australia.

The first regulations referring to land settlement in Western Australia were issued by the Colonial Office in 1829, at the time when Captain James Stirling was appointed Civil Superintendent of the Swan River settlement. The first special grants were made in favour of Captain Stirling himself for an area of 100,000 acres near Geographe Bay; and of Mr. Thomas Peel, for 250,000 acres on the southern bank of the Swan River and across the Channing to Cockburn Bay—Mr. Peel covenanting to introduce at his own cost 400 immigrants into the colony by a certain date. Persons proceeding to the settlement at their own cost, in parties in which the numbers were in the proportion of five females to every six male settlers, received grants in proportion to the amount of capital introduced, at the rate of 40 acres for every sum of £3. Capitalists were granted land at the rate of 200 acres for every labouring settler introduced at their expense, but these grants were subject to cancellation if the land was not brought into cultivation or reclaimed within twenty-one years. These regulations were amended by others of a similar nature, issued on the 20th July, 1830. In 1832, however, the mode of disposing of Crown lands by sale came into force, the regulations issued in that year assimilating the system of settlement to that in force in the colonies of New South Wales and Van Diemen's Land. Other alterations were made from time to time, until in 1873 an entirely new system was introduced, which has served as the basis of the regulations at present in force, promulgated on the 2nd March, 1887.

For the purposes of these new land regulations, which were passed by the Legislative Council in 1886, the colony is divided into six divisions, namely, the South-west Division, the Gascoyne Division, the North-west Division, the Kimberley Division, the Eucla Division, and the Eastern Division. Land may be acquired in the following manner:—(1) By auction of town and suburban lands in all divisions, at an upset price to be determined by the Commissioner; (2) by conditional purchase—(*a*) by deferred payments with residence within agricultural areas in the South-west Division; (*b*) by deferred payments with residence outside agricultural areas in the South-west Division; (*c*) by deferred payments without residence in the South-west Division of areas not exceeding 1,000 acres—the two former at a price of not less than 10s. per acre, payable in twenty yearly instalments, and the latter at 20s. an acre; (*d*) by deferred payments without residence within special areas in the Kimberley, North-west, Gascoyne, Eastern, and Eucla Divisions, of a maximum area of 5,000 acres, at a price of not less than 10s. an acre, payable in ten yearly instalments; (*e*) by direct payment without residence in the South-west Division, of areas not less than 100 acres nor more than 1,000 acres within an agricultural area, nor more than 5,000 acres outside an agricultural area, at a price of not less than 10s. per acre, 10 per cent. of which is to be paid on application and the

balance within one month of date of approval: (*f*) by direct payment, without residence, for gardens, in all divisions, of areas of not less than 5 nor more than 20 acres, at not less than 20s. an acre.

Auction Lands.

Town and suburban lands in all divisions may be sold by public auction, at an upset price to be determined by the Governor-in-Council. Any person may apply to the Commissioner to put up for sale by auction any town or suburban lands already surveyed, on depositing 10 per cent. of the upset price, which is returned if such person does not become the purchaser. Should the purchaser not be the applicant, he must pay 10 per cent. on the fall of the hammer, and complete his purchase within thirty days.

Conditional Purchase.

In the South-west Division, agricultural areas of not less than 2,000 acres are set apart by the Governor-in-Council. The maximum quantity of land which may be held by any one person is 1,000 acres, and the minimum 100 acres. The price is fixed at 10s. an acre, payable in twenty yearly instalments of 6d. an acre, or sooner in the occupier's option. Upon the approval of an application, a license is granted for five years. Within six months the licensee must take up his residence on some portion of the land; and he must enclose the whole area with a good substantial fence during the term of his license. If these conditions are fulfilled, a lease is granted to him for fifteen years. After the lease has expired, provided that the fence is in good order, that improvements have been made equal to the full purchase money, and that the full purchase money has been paid, a Crown grant is given.

Land may be purchased outside agricultural areas by free selection, on deferred payment with residence, and otherwise subject to all the conditions required within agricultural areas as already stated.

Under the third mode of purchase, the applicant is subject to all the conditions, except that of residence, imposed under the first mode, but he has to pay double the price, namely, £1 per acre, in twenty yearly instalments of 1s. per acre.

By the fourth mode, land of a minimum extent of 100 acres and a maximum of 1,000 acres, within an agricultural area, and not more than 5,000 acres outside an agricultural area, may be applied for at a price (at present 10s. per acre) fixed by the Governor-in-Council. Within three years the land must be enclosed, and within five years a sum equal to 5s. per acre must be spent on improvements.

For garden purposes, small areas of not less than 5 acres nor more than 20 acres (except in special cases) may be purchased within all divisions at 20s. per acre, on condition that within three years the land shall be fenced in, and one-tenth of the area planted with vines or fruit-trees or vegetables.

In the Kimberley, North-west, Gascoyne, Eastern, and Eucla Divisions, special areas of not less than 5,000 acres are set apart for purchase. The quantity of land held by any person in one division may not exceed 5,000 acres nor be less than 100 acres. The price at present is 10s. an acre, payable in ten years or sooner in the purchaser's option. Upon approval, a lease will issue for ten years. Within two years the land must be fenced in. On the expiration of the lease, a grant from the Crown will be issued, provided that the fence is in good order, that the purchase money has been paid, and that, in addition to the fencing, improvements of a value equal to the purchase money have been effected.

Pastoral Lands.

Pastoral lands are granted on lease, which gives no right to the soil or to the timber, and the lands may be reserved, sold, or otherwise disposed of by the Crown during the term. The following are the terms of pastoral leases in the several divisions ; all leases expire on the 31st December, 1907, and the rental named is for every 1,000 acres :— South-west.—In blocks of not less than 3,000 acres, at 20s. Gascoyne and Eucla.—In blocks of not less than 20,000 acres : for each of the first seven years, 10s. ; for each of the second seven years, 12s. 6d. ; for each of the third seven years, 15s. North-west.—In blocks of not less than 20,000 acres : for the first seven years, 10s. ; for the second seven years, 15s. ; for the third seven years, 20s. Eastern.—In blocks of not less than 20,000 acres : for the first seven years, 2s. 6d. ; for the second seven years, 5s. ; for the third seven years, 7s. 6d. Kimberley.— In blocks of not less than 50,000 acres with frontage, and 20,000 without frontage : for the first seven years, 10s. ; for the second seven years, 15s. ; and for the third seven years, 20s. Any lessee in the Kimberley Division may obtain a reduction of one-half the rental due under the regulations, computed from the 1st day of January, 1887, for the first fourteen years of his lease, if within five years of the date of these regulations he should have in his possession within the division ten head of sheep or one head of large stock for every thousand acres leased. A similar concession may be obtained by a lessee in the Eucla Division, but here the reduction is also granted if the lessee should have expended a sum equal to £8 per 1,000 acres in constructing tanks, wells, or dams, or in boring for water. Except in the South-western Division, a penalty of double rental for the remaining portion of the lease is imposed, should the lessee within seven years have failed to comply with the stocking or improvement clause.

Any person desirous of obtaining a lease of land on which the poison plant grows may obtain such on application, covering one year's rent at the rate of £1 per 1,000 acres. The lease is granted on condition that the land is enclosed within three years. Should the poison plant be completely eradicated before the lease expires, the lessee is entitled to a Crown grant.

Mining Areas.

Business licenses may be issued to any person, not being an Asiatic or African alien, on payment of the prescribed fee; and the licensee is entitled to occupy an area not exceeding 1 acre for residential and business purposes, with right of transfer.

Homestead Farms.

The Homesteads Act, 1893, is divided into three parts, the first part dealing with free homestead farms, the second with homestead leases, and the third with general matters. Under the first part of the Act the Governor may set apart for selection as free farms, either exclusively or partly, certain areas situated within 40 miles of a railway. Unless otherwise ordered, such selections are to be limited to alternate blocks, and are not to exceed in area 160 acres. The exempted portions may be alienated under the provisions of the land regulations or any law relating to Crown lands. Preliminary survey and notification in the *Gazette* are required, and blocks set apart for free farms may at any time be withdrawn. Application may be made by any person who is the sole head of a family, or by any male person who has attained the age of 18 years, provided the applicant be not already in possession of 100 acres or more within the colony, either in fee-simple or under special occupation or conditional purchase. A statutory declaration and a fee of £1 must be submitted with the application, after approval of which by the Minister the applicant will receive a certificate enabling him to take possession. Residence is imposed during six out of every twelve months during the first five years of the lease, except in cases of illness, or for some other valid reason which prevents compliance with this condition. The applicant may be relieved from residence on payment of a prescribed fee and the expenditure of twice the required amount on improvements. Within two years £30 must be expended by the selector in erecting a suitable house, in clearing, or in clearing and cropping, or in lieu thereof 2 acres of orchard or vineyard must be properly prepared and planted; within five years at least one-fourth of the land must be enclosed, and one-eighth cropped; and within seven years the whole selection must be enclosed, and at least one-fourth cleared and cropped. Afterwards, upon proof that the residential and other conditions have been duly complied with, a Crown grant will be issued on payment of survey, Crown grant, and registration fees. Until that time assignments, transfers, and mortgages are null and void, and any such agreement entered into by the lessee leads to the forfeiture of the homestead farm, and debars him from making another application for a similar lease; but a person who has received a certificate to the effect that he is entitled to a Crown grant, may legally dispose of, and convey, assign, transfer, or mortgage his right and title therein. A selector who can prove residence for twelve months from the date of taking possession, and who has

made all the improvements required to entitle him to a Crown grant, may at any time before the expiration of seven years receive a Crown grant on payment of 5s. per acre, together with survey, Crown grant, and registration fees. Village sites may be set apart not more than 5 miles distant from land intended for homestead farms, and subdivided into areas not exceeding 1 acre each. A selector may obtain a village allotment free, and build a house and take up his residence there instead of upon his farm. The improvements on the homestead farm must, however, be made as before described. A Crown grant for the village allotment may be obtained, as soon as the selector is entitled to a grant for his homestead farm, on payment of £1, together with survey, Crown grant, and registration fees.

Homestead Leases.

Crown lands may be set apart for homestead leases within 40 miles of a railway. They are divided into second and third class lands, the area of a lease being from 1,000 to 3,000 acres of second-class, and from 1,000 to 5,000 acres of third-class lands. The currency of all leases is thirty years. For third-class lands the rent is fixed at 1d. per acre per annum for the first fifteen years, and 2d. for the last fifteen years of the lease; and for second-class lands, at 2d. per acre per annum for the first fifteen years, and 3d. for the remainder of the term. The lessee has to comply with the following conditions:—He must pay one-half of the prescribed cost of survey in five yearly instalments; he must reside on the land, either personally or by his agent or servant, for nine out of every twelve months during the first five years; he must within two years fence half the area of the lease, and within four years the whole area; he must expend, during each year from the sixth to the fifteenth, 8d. per acre on the improvement of second-class lands, or 5d. per acre on third-class lands. If he should spend more during one year, he may take credit for the excess in the following year or years. Improvements may consist of subdivision, clearing, cultivating, grubbing, draining, ringbarking, tanks, dams, wells, or any other work which increases or improves the agricultural or pastoral capabilities of the land. The boundary fence, after its erection, must at all times be kept in good order and repair. If the Minister approves of an application for a lease, and the land is not yet surveyed, the time for making improvements, etc., is to be computed from the day when the survey is completed. On the expiration of a lease, if all the terms have been complied with, the lessee is entitled to a Crown grant on payment of Crown grant and registration fees. He may obtain his grant earlier should he have spent, in addition to the cost of the boundary fence, an amount equal to the aggregate rent payable for the last twenty-five years of his lease; but in that case he must pay the difference between the aggregate amount of rents already paid and the value of the land, calculated at 6s. 3d. per acre for second-class, and 3s. 9d. per acre for third-class lands. Transfers

are allowed after five years' residence, either personally or by an agent; but the approval of the Minister must first be obtained, and no lease can be transferred to any person who is already the holder of a homestead lease.

Resumption of Lands.

The Lands Resumption Act of 1894 provides for the resumption of land for the public purposes set out in detail therein. The manner in which the resumption is to be made is set forth, and on the publication of the Order in Council the land becomes vested in Her Majesty, compensation being based on the probable and reasonable price for which the fee-simple with any improvements upon the land may be expected to sell at the time of resumption, except in those cases where the Crown is entitled to resume under the provisions of the grant. The provisions of certain sections of the Railways Act of 1878 and amendments thereto, are held to be applicable to the methods of settling compensation or arbitration in respect of lands so resumed.

TASMANIA.

In the earlier period of the occupation of Tasmania, from 1804 to 1825, the island was administered as a part of New South Wales, and its settlement was subject to the regulations affecting the disposal of the Crown domain in that colony. After its constitution under a separate administration, the regulations issued from the Colonial Office for the settlement of the Crown lands in the mother colony were made applicable also to Tasmania. New measures were introduced after self-government had been granted to the province, but they became so complicated and cumbersome that in 1890 the necessity was felt of passing an Act consolidating into one comprehensive and general measure the twelve Acts then in force.

The business of the Lands and Survey Departments is now transacted by virtue of the Crown Lands Act of 1890, under which, for the convenience of survey operations, the island is divided into fourteen districts. Lands of the Crown are divided into two classes—town lands and rural lands, the latter being further subdivided into first-class agricultural lands and second-class lands. Lands which are known to contain auriferous or other minerals, and such lands as may be necessary for the preservation and growth of timbers, are dealt with under separate sections; and the Governor-in-Council is empowered to reserve such lands as he may think fit for a variety of public purposes.

Land may be acquired in the following manner:—(1) By selection of rural lands in areas of not less than 15 nor more than 320 acres, at an upset price of £1 per acre, with one-third added for credit; (2) by selection of rural lands of not less than 15 nor more than 50 acres, at an upset price of £1 per acre, with one-third added for credit; (3) by selection of lands within mining areas—if situated within 1 mile of a

town reserve, of an area of not less than 1 nor more than 10 acres; and if at a greater distance than 1 mile, of not less than 10 nor more than 100 acres—the upset price of first-class lands being not less than £1 per acre, payable in fourteen years, and that for second-class lands not less than 10s. per acre, payable in ten years; (4) by auction—(*a*) of town lands at the upset price notified in the *Gazette*, (*b*) of second-class lands at an upset price of 10s. per acre in lots of not less than 30 nor more than 320 acres, (*c*) of rural lands at an upset price of not less than £1 per acre (maximum area 320 acres), (*d*) of lands within mining areas in areas of not less than 1 nor more than 100 acres at an upset price of not less than £1 per acre, payable in fourteen years; (5) by after-auction sale of rural lands previously offered at auction and not bid for, at the upset price notified in the *Gazette*.

In the rural division any person of the age of 18 years may select by private contract at the price and upon the terms set forth hereunder:—

One lot of rural lands not exceeding 320 acres nor less than 15 acres.

	£	s.	d.
100 acres at 20s.	100	0	0
Add ⅓ for credit	33	6	8
	133	6	8

Payable as follows:—	£	s.	d.			
Cash at time of purchase	3	6	8			
First year	5	0	0			
Second year	5	0	0			
Third year	10	0	0			
And for every one of the eleven successive years to the fourteenth year inclusive at the rate of £10 per annum	110	0	0			
				133	6	8

And in like proportions for any greater or smaller area than 100 acres; but credit is not given for any sum less than £15. Additional selections may be taken up provided the total area held by one selector does not exceed 320 acres. Selection by agent is not allowed.

Sales of Land on Credit.

Any person of the full age of 18 years, who has not purchased under the Crown Lands Acts, may select and purchase one lot of rural land of not more than 50 acres nor less than 15 acres; and on payment of a registration fee of £1 an authority is issued to the selector to enter upon and take possession of the land, which must be done in person within six months from the date of issue of certificate. The purchase money, which is calculated on the upset price of £1 per acre, together with the survey fee, and with one-third of the whole added for credit, is payable in fifteen annual instalments, the first of which is due in the fourth year of occupation. A condition of purchase is that the selector shall expend a sum equal to £1 per acre in effecting

substantial improvements (other than buildings) on the land, or reside habitually thereon for the full term of eighteen years, before a grant deed is issued. Where a purchaser is unable to pay the instalments as they become due, they may be deferred for any period up to five years on payment of interest at the rate of 5 per cent., if all other conditions have been fulfilled; and the selector may take possession of his land as soon as his application has been approved by the Commissioner and the survey fee paid.

The conditions in connection with the credit system are as follow:— The purchaser must commence to make improvements on the expiration of one year from the date of contract, and during eight consecutive years must expend not less than 2s. 6d. per acre per annum, under penalty of forfeiture. Any surplus over 2s. 6d. per acre spent in any year may be set against a deficiency in another year, so that £1 per acre shall be spent in the course of the eight years. In the event of improvements to the full amount being made before the expiration of the eight years, the purchaser may pay off any balance due, discount being allowed. Payment of instalments may in certain cases be postponed, but under such circumstances interest must be paid at the rate of 5 per cent. per annum. In certain cases the time for making the improvements may be extended for two years. Should an instalment not be paid within sixty days after becoming due, the land may be put up to auction, the defaulter having the privilege of redeeming his land up to the time of sale by payment of the amount due, with interest and costs. If land sold at auction by reason of default should realise more than the upset price, the excess is handed to the defaulter. Land purchased on credit is not alienable until paid for, but transfers are allowed. For five years after alienation land is liable to be resumed for mining purposes, compensation being paid to the occupier. All grant-deeds contain a reservation by the Crown of the right to mine for minerals.

Second-class lands may be sold by auction at the upset price of 10s. per acre in lots of 30 to 320 acres, the latter being the maximum quantity which any one purchaser can hold under the Act on credit. One-half of the purchase money is to be expended in making roads. Improvements, other than buildings, to the value of 5s. per acre are to be effected by the purchaser, beginning at the expiration of one year from the date of contract, and to be continued for the next five years at the rate of 1s. per acre per annum, the deed of grant issuing only when the amount of 5s. per acre has been expended. Non-fulfilment of the conditions entails forfeiture. Where the purchaser has fulfilled the conditions, but is unable to complete the purchase of the whole, a grant may issue for so much as has been paid for upon the cost of survey being defrayed. On approval of the application by the Commissioner and payment of the survey fee the selector may at once enter into possession.

Rural lands not alienated and not exempt from sale may be sold by auction. Town lands are sold only in this way. £1 per acre is the lowest upset price, and agricultural lots must not exceed 320 acres.

Lands unsold by auction may be disposed of by private contract. No lands may be sold by private contract within 5 miles of Hobart or Launceston.

Mining Areas.

Mining areas may be proclaimed, within which land may be selected or sold by auction, in lots varying with the situation—from 1 to 10 acres if within a mile from a town, and up to 100 acres if at a greater distance. In such cases residence for five years is required, and in default the land is forfeited to the Crown. Occupation licenses are granted to holders of miners' rights or residence licenses for cultivation or pasture within areas withdrawn from the operation of the Crown Lands Act, in lots of not more than 20 acres, for a period of two years at 5s. per acre, on terms prescribed by regulation, and an area not exceeding $\frac{1}{4}$ of an acre may be sold by auction, the person in occupation having a preferential right of private purchase at the upset price fixed by the Land Commissioner. A deposit of one-sixth of the purchase money must be made on the approval of the sale, the balance to be paid in eleven equal monthly instalments.

Land selected or bought within a mining area is open to any person in search of gold or other mineral, after notice has been given to the owner or occupier, to whom compensation must be made for damage done. Persons who occupy land in a mining town, under a business license, and who have made improvements to the value of £50, may purchase one quarter of an acre at not less than £10 nor more than £50, exclusive of the value of improvements and cost of survey and deed fee.

Residence licenses may be issued to mining associations for a period of 21 years at 10s. for each year of the term. The same party may hold two licenses if the areas are 5 miles apart.

Grazing Leases.

Grazing leases of unoccupied country may be offered at auction, but such runs are liable at any time to be sold or licensed, or occupied for other than pastoral purposes. The rent is fixed by the Commissioner, and the run is put up to auction, the highest bidder receiving a lease for fourteen years. The lessee may cultivate such portion of the land as is necessary for the use of his family and establishment, but not for sale or barter of produce. Should any portion of the run be sold or otherwise disposed of, a corresponding reduction may be made in the rent, which is payable half-yearly in advance. A lease is determinable should the rent not be paid within one month of becoming due. In the event of the land being wanted for sale or any public purpose, six months' notice must be given to the lessee, who receives compensation for permanent improvements. Leases for not more than fourteen years may be granted for various public purposes, such as the erection of wharfs, docks, etc. Portions of a Crown reserve may also be leased for thirty years for manufacturing purposes.

New Zealand.

The first settlements in New Zealand were founded upon land obtained from the various native tribes, and the task of distinguishing between the few *bona-fide* and the numerous bogus claims to the possession of land thus acquired was the first difficulty which confronted Captain Hobson when, in 1840, he assumed the government of the colony. Trading in land with the natives had, from 1815 to 1840, attained such proportions that the claims to be adjudicated upon covered 45,000,000 acres—the New Zealand Company, of which Mr. Edward Gibbon Wakefield, of South Australian fame, was the managing director, claiming an estate of no less than 20,000,000 acres in area. In the year 1840, the Legislature of New South Wales passed a Bill empowering the Governor of that colony to appoint a Commissioner to examine and report upon all claims to grants of land in New Zealand—all titles, except those allowed by Her Majesty, being declared null and void. This Bill, before receiving the Royal assent, was superseded by an Act of the local Council, passed in 1841, under which the remaining claims were settled, and new regulations were adopted for the future disposal of the Crown lands. When, later on, the colony became divided into independent provinces, each district had its own regulations, but in 1858 an Act was passed by the General Assembly embodying all the regulations under which land could be alienated or demised in the various provinces of the colony. This Act was repealed in 1876, and the enactments of 1885, 1887, and 1888 which followed have been superseded by the Lands Act of 1892 and its Amending Acts of 1893 and 1895, under which the Crown lands are now administered. For convenience the colony is divided into ten land districts, each being under the direction of a local commissioner and a land board.

Classification of Lands.

Crown lands are divided into three classes :—1. Town and village lands, the upset prices of which are respectively not less than £20 and £3 per acre. Such lands are sold by auction. 2. Suburban lands, being lands in the vicinity of any town lands, the upset price of which may not be less than £2 per acre. These lands are also sold by auction. 3. Rural lands, being lands not reserved for towns and villages, classified into first and second-class lands, which may be disposed of at not less than £1 per acre for first-class, and 5s. an acre for second-class lands. Such lands may be either sold by auction after survey, if of special value, as those covered with valuable timber, etc., or be declared open for application as hereafter described. Pastoral lands are included within the term "rural lands," and are disposed of by lease. No person can select more than 640 acres of first-class or 2,000 acres of second-class land, inclusive of any land already held ; but this proviso does not apply to pastoral land.

Mode of Alienation.

Crown lands may be acquired as follows:—(1) At auction, after survey, in which case one-fifth of the price must be paid down at the time of sale, and the balance, with the Crown grant fee, within thirty days; and (2) by application, after the lands have been notified as open to selection, in which case the applicant must fill up a form and make the declaration and deposit required by the particular system under which he wishes to select.

After lands have been notified as open under the optional system, they may be selected for cash, on condition that first-class lands shall within seven years be improved to the amount of £1 per acre, and second-class lands to the amount of 10s. per acre. One-fifth of the price is payable at the time of application, and the balance within thirty days, if the land is surveyed; or if the land is unsurveyed, the survey-fee, which goes towards the purchase of the land, and the balance within thirty days of notice that survey is completed. A certificate of occupation issues to the purchaser on the final payment being made, and is exchanged for a Crown grant so soon as the Board is satisfied that the improvements have been completed.

After notification, lands may be selected for occupation, with right of purchase, under a license for twenty-five years. At any time subsequent to the first ten years, and after having resided on the land and made the improvements hereafter described, the licensee can, on payment of the upset price, acquire the freehold. If not purchased after the first ten and before the expiry of the twenty-five years of the term, the license may be exchanged for a lease in perpetuity. The rent is 5 per cent. on the cash price of the land. A half-year's rent must be deposited with the application, if for surveyed land, and this sum represents the six months' rent due in advance on the 1st day of January or July following the selection. If the land is unsurveyed, the cost of survey is to be deposited, and is credited to the selector as so much rent paid in advance, counted from the 1st day of January or July following thirty days' notice of the completion of survey. Residence on and improvement of the land are compulsory, as hereafter described. Land held on deferred payment may be mortgaged under the Government Advances to Settlers Act of 1894.

Perpetual Leases.

Lands notified under the optional system may be selected on a lease for 999 years (or in perpetuity), subject to the undernoted conditions of residence and improvements. The rental is 4 per cent. on the cash price of the land. In the case of surveyed lands, the application must be accompanied by half a year's rent, which represents that due on the 1st day of January or July following the date of selection. In the case of unsurveyed lands, the cost of survey must be deposited, and is credited to the selector as so much rent paid in advance, dating from the 1st day of January or July after thirty days' notice of completion of survey.

Two or more persons may make a joint application to hold as tenants in common under either of the two last-named tenures. Crown lands may be leased to any society for the establishment of industrial, rescue, or reformatory homes, for a period of twenty-one years, with perpetual right of renewal at an annual rental of 5 per cent. on the capital value, subject to such conditions as the Minister may deem fit to prescribe. In the event of default, the land, with any improvements thereon, reverts to the Crown.

Conditions of Tenure.

Under all systems—excepting cash purchases or pastoral and small grazing-run leases—residence and improvements are the same. Residence is compulsory (with a few exceptions mentioned in the Act), and must commence on bush or swamp lands within four years, and on open or partly open lands within one year from the date of selection. On lands occupied with a right of purchase, residence must be continuous for six years in the case of bush or swamp lands, and for seven years in the case of open or partly open lands; on lease-in-perpetuity lands it must be continuous for a term of ten years. The Board has power to dispense with residence in certain cases, such as where the selector resides on adjacent lands, or is a youth or an unmarried woman living with his or her parents. The term "residence" includes the erection of a habitable house to be approved of by the Board.

Improvements are the same for all classes of land—excepting cash purchases or pastoral and small grazing-run leases—and are as follow:—Within one year from the date of the license or lease the land must be improved to an amount equal to 10 per cent. of its value; within two years, to the amount of another 10 per cent.; within six years, to the amount of another 10 per cent., making 30 per cent. in all within the six years; and in addition to the foregoing, it must be further improved to the amount of £1 an acre for first-class land, and for second-class to an amount equal to the net price of the land, but not more than 10s. an acre. Improvements comprise the reclamation of swamps, the clearing of bush, cultivation, the planting of trees, the making of hedges, the cultivation of gardens, fencing, draining, the making of roads, wells, water-tanks, water-races, sheep-dips, embankments or protective works, or the effecting of any improvement in the character or fertility of the soil, or the erection of any building, etc.; and cultivation includes the clearing of land for cropping, or clearing and ploughing for laying down artificial grasses, etc.

Under the existing regulations any group of persons numbering not less than twelve may apply for a block of land of not less than 1,000 acres nor more than 11,000 acres in extent, but the number of members must be such that there shall be one for every 200 acres in the block, and no one may hold more than 320 acres, except of swamp lands, of which the area may be 500 acres. The price of lands within a special settlement is fixed by special valuation, but it cannot be less than 10s. an acre. The rental

may not be less than 4 per cent. on the capital value of the land; the tenure is lease in perpetuity. Residence, occupation, and improvements are generally the same as already described, and applications have to be made in the manner prescribed by the regulations.

Village Settlements.

Village settlements are disposed of under regulations made from time to time by the Governor, but the main features are as follow:—Such settlements may be divided into—(1) Village allotments not exceeding one acre each, which are disposed of either at auction or upon application as already described, with option of tenure, the cash price being not less than £3 per allotment; and (2) homestead allotments not exceeding 100 acres each, which are leased in perpetuity at a 4-per-cent. rental on a capital value of not less than 10s. per acre. Where a village-settlement selector has taken up less than the maximum area prescribed, he may obtain an additional area in certain cases without competition on the same tenure and terms as the original holding. Residence, improvements, and applications are the same as already described. The leases are exempt from liability to be seized or sold for debt or bankruptcy. The Governor is empowered in certain cases to advance small sums for the purpose of enabling selectors to profitably occupy their allotments.

Grazing Areas.

Small grazing runs are divided into two classes: first-class, in which they cannot exceed 5,000 acres; and second-class, in which they cannot exceed 20,000 acres in area. These runs are leased for terms of twenty-one years, with right of renewal for a like term, at a rent of 2½ per cent. on the value of the land. The runs are declared open for selection, and applications and declarations on the forms provided have to be filled in and left at the Lands Office, together with a deposit of six months' rent, representing that due on the 1st day of March or September following selection. A selector may not hold more than one small grazing run, nor may he hold any freehold or leasehold land of any kind whatsoever over 1,000 acres, exclusive of the area for which he applies under this system. The lease entitles the holder to the grazing rights and to the cultivation of any part of the run, and to the reservation of 150 acres around his homestead through which no road may be taken; but the runs are subject to the mining laws. Residence is compulsory on bush or swamp land within three years, and on open land within one year; and it must be continuous to the end of the term, though this latter condition may in certain cases be relaxed. Improvements are necessary as follow:—Within the first year, to the amount of one year's rent; within the second year, to the amount of another year's rent;

and within the next four years to the value of two years' rent; making a sum equal to four years' rental to be spent on the run in six years. In addition to this, a first-class run must be improved to an amount of 10s. an acre, and a second-class run to an amount of 5s., if the land be under bush. After three years' compliance with these conditions, the run may be divided among the members of the selector's family who are of the age of 17 years and upwards, and new leases may be issued to them on the terms and subject to the conditions of residence and improvements contained in the original lease.

Pastoral Leases.

Purely pastoral country is let by auction for a term not exceeding twenty-one years; but, except in extraordinary circumstances, no run can be of a carrying capacity greater than 20,000 sheep or 4,000 cattle. Runs are classified from time to time into those which are suitable for carrying more than 5,000 sheep (let as above), and into pastoral-agricultural country, which may either be let as pastoral runs, generally for short terms, or be cut up for settlement in some form. Leases of pastoral-agricultural lands may be resumed without compensation at any time after twelve months' notice has been given. No one can hold more than one run unless it possesses a smaller carrying capacity than 10,000 sheep or 2,000 cattle, in which case the lessee may hold additional country up to that limit. Runs are offered at auction from time to time, and half a year's rent must be paid down at the time of sale, representing that due in advance on the 1st March or September following; and the purchaser has to make the declaration required by the Act. All leases begin on the 1st March; they entitle the holder to the grazing rights, but not to the soil, timber, or minerals. A lease terminates at any part of the run which may be leased for another purpose, purchased, or reserved. The tenant must prevent the burning of timber or bush, and the growth of gorse, broom or sweet-briar, and destroy the rabbits on his run. With the consent of the Land Board, the interest in a run may be transferred or mortgaged, but power of sale under a mortgage must be exercised within two years. In case it is determined to again lease any run, it must be offered at auction twelve months before expiry of the term, and if, on leasing, it is purchased by some person other than the previous lessee, valuation for improvements, to be made by an appraiser, must be paid by the incoming tenant, to an amount not greater than three times the annual rent, except in the case of a rabbit-proof fence, which is valued separately. Runs may also be divided with the approval of the Land Board. Where a lessee seeks relief, and the application is favourably reported on by the Board, the whole or part of one year's rent payable or paid may be remitted or refunded, or the lease may be extended, or a new lease or license issued in lieu thereof. The Minister may also postpone payment of rent or sheep rate where a tenant has applied or signified his intention of applying for relief.

Acquisition of Land for Settlement.

The administration of the law in respect of the acquisition of land for settlement is vested in a Board styled the Board of Land Purchase Commissioners, and consisting of the Surveyor-General, the Commissioner of Taxes, and the Commissioner of Crown Lands for any district in which it is proposed to acquire land, the Land Purchase Inspector, and a member of the Land Board of the district. The duties devolving upon the Board are to ascertain the value of any lands proposed to be acquired, and to report to the Minister as to their character and suitableness for settlement, and as to the demand for settlement in the locality. Land may be compulsorily taken for the purposes of the Act. The rent of land acquired and disposed of under the Act is at the rate of 5 per cent. on the capital value of the land, and the capital value is to be fixed at a rate sufficient to cover the cost of the original acquisition, together with the cost of survey, subdivision, and making due provision for roads. Where land acquired contains a homestead, a lease in perpetuity of the homestead and land surrounding it, not exceeding 640 acres, may be granted to the person from whom it was acquired, on conditions prescribed, at a yearly rental of 5 per cent. on the capital value of the land, such capital value to be determined in the manner set forth above.

A large area, principally in the North Island, remains in the hands of the native race, and this land may be acquired for settlement after a report upon its character, suitableness for settlement, and value, has been made by a Board specifically appointed for the purpose. On notification, the land becomes Crown land, subject to trust for native owners.

Australasian Settlement.

The particulars given in the foregoing pages will have made the fact abundantly clear that the main object of the land legislation, however variously expressed, has been to secure the settlement of the public estate by an industrious class, who, confining their efforts to areas of moderate extent, would thoroughly develop the resources of the land. But where the character of the country does not favour agricultural occupation or mixed farming, the laws contemplated that the State lands should be leased in blocks of considerable size for pastoral occupation, and it was hoped that by this form of settlement vast tracts which, when first opened up, seemed ill-adapted even for the sustenance of live-stock, might ultimately be made available for industrial settlement. To how small an extent the express determination of the legislators to settle an industrious peasantry on the soil was accomplished will presently be illustrated from the records of several of the provinces; but in regard to pastoral settlement the purpose was fully achieved—large areas, which were pronounced even by experienced explorers to be uninhabitable wilds, have since been occupied by thriving flocks, and every year sees the great Australian desert of the early

explorers receding step by step. The following statement shows the area of land alienated by each province, the area leased, and the area neither alienated nor leased at the close of 1897. The term "alienated" is used for the purpose of denoting that the figures include lands granted without purchase. The area so disposed of has not been inconsiderable in several provinces:—

Colony.	Area.	Area alienated or in process of alienation.	Area leased.	Area neither alienated nor leased.
	acres.	acres.	acres.	acres.
New South Wales	198,848,000	45,738,687	124,184,284	28,925,029
Victoria	56,245,760	24,245,886	17,505,858	14,494,016
Queensland	427,838,080	14,814,093	245,966,061	167,057,926
South Australia	578,361,600	14,386,445	229,737,207	334,237,948
Western Australia	624,588,800	8,847,044	88,122,828	527,618,928
Tasmania	16,778,000	4,768,901	891,244	11,117,855
New Zealand	66,861,440	22,107,234	14,547,731	30,206,475
Australasia	1,969,521,680	134,908,290	720,955,213	1,113,658,177

The proportions which these figures bear to the total area of each colony are shown below:—

Colony.	Area alienated or in process of alienation.	Area leased.	Area neither alienated nor leased.
	per cent.	per cent.	per cent.
New South Wales	23·00	62·45	14·55
Victoria	43·11	31·12	25·77
Queensland	3·46	57·49	39·05
South Australia	2·49	39·72	57·79
Western Australia.....	1·42	14·11	84·47
Tasmania.....	28·42	5·31	66·27
New Zealand	33·06	21·76	45·18
Australasia	6·85	36·60	56·55

The figures in the foregoing table disclose many grounds for congratulation. Of 1,969 million acres which comprise the area of Australasia, 856 millions, or 43·45 per cent., are under occupation for productive purposes, and there is every probability that this area will be greatly added to in the near future. New South Wales shows the least area returning no revenue, for out of nearly 200 million acres only 29 million remain unoccupied, and much of this is represented by lands which the State has reserved from occupation, and which are used for travelling stock or for various public purposes, including lands reserved for future settlement along the track of the great trunk line of railways. The colony of Tasmania has 66 per cent. of its area unoccupied, the western part of the island being so rugged as to forbid settlement. New Zealand, favoured also with a beneficent climate, has nearly half its area not utilised,

a circumstance entirely due to the mountainous character of its territory. Settlement in Western Australia is only in its initial stage; much of the area of the colony is practically unknown, and a large part of what is known is thought to be little worth settlement. Much the same thing was confidently predicted of western New South Wales and South Australia, though, as subsequent events proved, the forebodings were untrue. In South Australia, including the Northern Territory, only 42·21 per cent. is in occupation.

The practice of sales by auction without conditions of settlement was a necessary part of the system of land legislation which prevailed in most of the colonies; but this ready means of raising revenue offered the temptation to the Governments, where land was freely saleable, to obtain revenue in an easy fashion. The result of the system was not long in making itself felt, for pastoralists and others desirous of accumulating large estates were able to take advantage of such sales, and of the ready manner in which transfers of land conditionally purchased could be made, to acquire large holdings, and in this manner the obvious intentions of the Lands Acts were defeated. Notwithstanding failures in this respect, the Acts have otherwise been successful, as will appear from the following table, as well as from other pages in this volume. It is unfortunate that detailed information regarding settlement can only be given for three of the colonies, viz., New South Wales, South Australia, and New Zealand. The information given for New South Wales in the table refers to the year 1897, for South Australia to the Census year of 1891, and for New Zealand to the Census year of 1896 :—

Size of Holdings.	New South Wales.		South Australia.		New Zealand.	
	Number of Holdings.	Area of Holdings.	Number of Holdings.	Area of Holdings.	Number of Holdings.	Area of Holdings.
		acres.		acres.		acres.
1 to 100 acres	34,456	1,143,795	6,804	183,443	34,556	934,154
101 to 1,000 acres	25,429	8,797,917	10,618	4,711,060	21,173	6,692,745
1,001 to 5,000 acres	4,215	8,626,338	2,394	4,623,937	2,367	4,929,539
5,001 to 20,000 acres	869	8,674,030	481	4,737,253	570	5,715,903
20,001 acres and upwards	329	16,276,841	58	1,974,995	274	15,039,871
Total	65,298	43,518,921	20,355	16,230,688	58,940	33,312,212

Out of the 43,518,921 acres set down to New South Wales in the foregoing, 39,561,087 acres are in the actual occupation of the owners, and 3,957,834 acres are held under rent. In New Zealand the proportion was not stated at the last Census. In South Australia only 5,510,289 acres are occupied by the owners, while 10,720,399 acres, or 66 per cent., are rented. The most remarkable feature of the table is that in New South Wales about one half the alienated land is owned by 674 persons. In South Australia 1,283 persons own half the alienated land.

APPENDIX.

AUSTRALASIAN STATISTICS,

1861-1897.

APPENDIX.

AUSTRALASIAN STATISTICS,

1861–1897.

No. 1.—Population on the 31st December.

Colony.	1860.	1870.	1880.	1890.	1897.
	No.	No.	No.	No.	No.
New South Wales.....	348,546	498,659	747,950	1,121,860	1,323,460
Victoria	537,847	726,599	860,067	1,133,266	1,176,248
Queensland	28,056	115,567	226,077	392,965	484,700
South Australia.....	124,112	183,797	267,573	319,414	363,044
Western Australia	15,227	25,084	29,019	46,290	161,924
Tasmania	87,775	100,765	114,762	145,290	171,719
New Zealand	79,711	248,400	484,864	626,048	729,056
Australasia.....	1,221,274	1,898,871	2,730,312	3,785,133	4,410,151

No. 2.—Increase of Population in ten-year periods.

Colony.	1851–60.	1861–70.	1871–80.	1881–90.	*1891–7.
	No.	No.	No.	No.	No.
New South Wales.....	187,261	150,113	249,291	373,910	201,600
Victoria	461,685	188,752	133,468	273,199	42,982
Queensland	†	87,511	110,510	166,888	91,735
South Australia.....	60,412	59,685	83,776	51,841	43,630
Western Australia	9,934	9,857	3,935	17,271	115,634
Tasmania	18,905	12,990	13,997	30,528	26,429
New Zealand	57,603	168,689	236,464	141,184	103,008
Australasia.....	795,800	677,597	831,441	1,054,821	625,018

* Increase during seven years. † Included in New South Wales figures.

No. 3.—Increase of Population by Excess of Births over Deaths.

Colony.	1851-60.	1861-70.	1871-80.	1881-90.	*1891-7.
	No.	No.	No.	No.	No.
New South Wales	64,164	104,574	139,950	209,705	164,414
Victoria	62,932	149,817	146,140	161,106	131,434
Queensland	†	19,320	36,661	65,358	63,544
South Australia	27,388	41,736	49,207	68,841	44,041
Western Australia	2,747	3,966	4,573	7,101	6,952
Tasmania	12,138	16,218	15,424	24,956	20,109
New Zealand	12,861	50,052	103,488	131,733	82,207
Australasia	182,230	385,683	495,443	668,800	512,701

* Increase during seven years. † Included in New South Wales figures.

No. 4.—Increase of Population by Excess of Arrivals over Departures.

Colony.	1851-60.	1861-70.	1871-80.	1881-90.	*1891-7.
	No.	No.	No.	No.	No.
New South Wales	123,097	45,539	109,341	164,205	37,188
Victoria	398,753	38,935	(–)12,672	112,093	(–)88,452
Queensland	†	68,191	73,849	101,530	28,191
South Australia	33,024	17,949	34,569	(–)17,000	(–) 411
Western Australia	7,187	5,891	(–) 638	10,170	108,682
Tasmania	6,767	(–)3,228	(–)1,427	5,572	6,320
New Zealand	44,742	118,637	132,976	9,451	20,801
Australasia	613,570	291,914	335,998	386,021	112,319

NOTE.—The sign (–) denotes loss of population by excess of departures over arrivals.
* Increase during seven years. † Included in New South Wales figures.

No. 5.—Births.

Colony.	1861.	1871.	1881.	1891.	1897.
	No.	No.	No.	No.	No.
New South Wales	14,681	20,143	28,993	39,458	37,247
Victoria	23,461	27,382	27,145	38,505	31,302
Queensland	1,423	5,205	8,220	14,715	14,313
South Australia	5,551	7,082	10,708	10,751	9,562
Western Australia	585	760	1,005	1,786	4,021
Tasmania	3,207	3,053	3,918	4,971	4,683
New Zealand	3,441	10,592	18,732	18,273	18,737
Australasia	52,349	74,217	98,721	128,459	119,865

No. 6.—Deaths.

Colony.	1861.	1871.	1881.	1891.	1897.
	No.	No.	No.	No.	No.
New South Wales	5,343	6,407	11,536	16,286	14,264
Victoria	10,522	9,918	12,302	18,631	15,128
Queensland	500	1,785	3,320	5,170	5,423
South Australia	1,962	2,378	4,012	4,231	4,044
Western Australia	257	332	412	869	2,643
Tasmania	1,477	1,363	1,733	2,234	1,947
New Zealand	1,109	2,642	5,491	6,518	6,595
Australasia	21,170	24,825	38,806	53,939	50,044

No. 7.—Marriages.

Colony.	1861.	1871.	1881.	1891.	1897.
	No.	No.	No.	No.	No.
New South Wales	3,222	3,953	6,284	8,457	8,813
Victoria	4,434	4,693	5,896	8,780	7,454
Queensland	320	970	1,703	2,905	2,894
South Australia	1,158	1,250	2,308	2,315	1,953
Western Australia	149	159	197	413	1,659
Tasmania	717	598	856	988	1,052
New Zealand	878	1,864	3,277	3,805	4,928
Australasia	10,878	13,487	20,521	27,663	28,753

No. 8.—Excess of Births over Deaths, 1897.

Colony.	Births.		Deaths.		Excess of Births over Deaths.		
	Males.	Females.	Males.	Females.	Males.	Females.	Total.
	No.	No.	No.	No.	No.	No.	No.
New South Wales	18,989	18,258	8,314	5,950	10,675	12,308	22,983
Victoria	16,005	15,297	8,533	6,595	7,472	8,702	16,174
Queensland	7,277	7,036	3,483	1,940	3,794	5,096	8,890
South Australia	4,897	4,665	2,256	1,788	2,641	2,877	5,518
Western Australia	2,036	1,985	1,825	818	211	1,167	1,378
Tasmania	2,483	2,200	1,116	831	1,367	1,369	2,736
New Zealand	9,600	9,137	3,787	2,808	5,813	6,329	12,142
Australasia	61,287	58,578	29,314	20,730	31,973	37,848	69,821

No. 9 —Birth, Death, and Marriage Rates, 1897.

Colony.	Per 1,000 of Mean Population.					Per-centage of Illegiti-mate to Total Births.
	Births.			Deaths.	*Marriages	
	Legiti-mate.	Illegiti-mate.	Total.			
New South Wales	26·55	1·87	28·42	10·88	6·72	6·58
Victoria	25·18	1·44	26·62	12·87	6·34	5·42
Queensland	28·12	1·80	29·92	11·33	6·05	6·02
South Australia	25·51	0·93	26·44	11·18	5·40	3·52
Western Australia	25·40	1·42	26·82	17·63	11·06	5·27
Tasmania	26·13	1·59	27·72	11·53	6·22	5·74
New Zealand	24·82	1·14	25·96	9·14	6·83	4·41
Australasia	25·92	1·52	27·45	11·46	6·58	5·55

*The figures in this column doubled give the ratio of persons married per 1,000 of mean population.

No. 10.—Index of Mortality.

Colony.	Per 1,000 of Mean Population.						
	1890.	1891.	1892.	1893.	1894.	1895.	1896.
New South Wales	16·51	18·68	15·65	16·71	16·32	15·69	16·45
Victoria	18·71	19·48	16·24	16·73	15·96	16·39	16·48
Queensland	17·29	15·52	15·82	16·66	16·29	15·21	16·73
South Australia	15·33	16·75	14·07	16·10	14·61	14·36	14·44
Western Australia	15·11	21·54	18·94	18·08	16·65	18·86	17·48
Tasmania	17·25	18·01	15·64	15·43	14·74	13·40	13·89
New Zealand	12·87	13·95	13·59	13·56	14·44	13·98	13·01
Australasia	16·68	17·83	15·47	16·16	15·68	15·49	15·71

NOTE.—The population of Sweden, divided into the five age groups of under 1 year; 1 year and under 20 years; 20 and under 40; 40 and under 60; and 60 and upwards, has been adopted as the standard population, in accordance with the recommendation of the International Statistical Institute.

No. 11.—Population of Capital Cities.

City.	1861.	1871.	1881.	1891.	1897.
	No.	No.	No.	No.	No.
Sydney	95,789	137,776	224,939	383,283	417,250
Melbourne	139,916	206,780	282,947	490,896	458,610
Brisbane	6,051	15,029	31,109	93,657	105,734
Adelaide	18,303	42,744	103,864	133,252	146,125
Perth	2,550	5,244	5,822	8,447	37,929
Hobart	19,449	19,092	21,118	33,450	39,172
Wellington	6,700	7,908	20,563	33,224	44,697

No. 12.—Shipping—Entered.

Colony.	1861.	1871.	1881.	1891.	1897.
	tons.	tons.	tons.	tons.	tons.
New South Wales.	366,236	706,019	1,456,239	2,821,898	3,331,877
Victoria.....	549,195	663,002	1,219,231	2,338,864	2,437,190
Queensland	23,257	59,451	455,985	502,794	569,610
South Australia. ...	103,196	187,314	684,203	1,368,720	1,868,274
Western Australia.	57,456	63,922	145,048	533,433	1,196,760
Tasmania	113,610	107,271	192,024	514,706	542,049
New Zealand	197,986	274,643	420,134	618,515	686,899
Australasia ...	1,410,936	2,061,622	4,572,864	8,698,930	10,632,659

No. 13.—Shipping—Cleared.

Colony.	1861.	1871.	1881.	1891.	1897.
	tons.	tons.	tons.	tons.	tons.
New South Wales..	379,460	794,460	1,330,261	2,872,338	3,412,554
Victoria.....	540,807	692,023	1,193,303	2,376,245	2,428,182
Queensland	21,388	57,956	426,506	494,324	559,290
South Australia ...	96,135	186,310	675,388	1,369,869	1,879,411
Western Australia.	57,800	63,026	139,998	512,122	1,181,072
Tasmania	116,608	108,889	191,738	529,900	542,119
New Zealand.	205,350	265,618	413,487	625,807	675,333
Australasia ...	1,417,548	2,168,282	4,370,681	8,780,605	10,677,961

No. 14.—Total Movement of Shipping—Entered and Cleared.

Colony.	1861.	1871.	1881.	1891.	1897.
	tons.	tons.	tons.	tons.	tons.
New South Wales..	745,696	1,500,479	2,786,500	5,694,236	6,744,431
Victoria.....	1,090,002	1,355,025	2,412,534	4,715,109	4,865,372
Queensland	44,645	117,407	882,491	997,118	1,128,900
South Australia ...	199,331	373,624	1,359,591	2,738,589	3,747,685
Western Australia.	115,256	126,948	285,046	1,045,555	2,377,832
Tasmania	230,218	216,160	383,762	1,044,606	1,084,168
New Zealand	403,336	540,261	833,621	1,244,322	1,362,232
Australasia ...	2,828,484	4,229,904	8,943,545	17,479,535	21,310,620

No. 15.—Shipping Entered and Cleared, per head of population.

Colony.	1861.	1871.	1881.	1891.	1897.
	tons.	tons.	tons.	tons.	tons.
New South Wales	2·11	2·95	3·64	4·98	5·15
Victoria	2·02	1·84	2·77	4·12	4·14
Queensland	1·46	0·98	3·90	2·48	2·36
South Australia	1·59	2·02	4·91	8·49	10·36
Western Australia	7·39	5·06	9·66	21·00	15·86
Tasmania	2·56	2·13	3·30	7·01	6·42
New Zealand	4·51	2·10	1·69	1·97	1·89
Australasia	2·27	2·19	3·22	4·55	4·88

No. 16.—Imports.

Colony.	1861.	1871.	1881.	1891.	1897.
	£	£	£	£	£
New South Wales	6,604,069	9,935,067	17,587,012	25,383,397	21,744,350
Victoria	13,532,452	12,341,995	16,718,521	21,711,608	15,454,482
Queensland	967,951	1,562,665	4,063,625	5,079,004	5,429,191
South Australia	1,976,018	2,158,022	5,320,549	10,051,123	7,277,086
Western Australia	147,913	*226,656	404,831	1,280,093	6,418,565
Tasmania	954,517	778,087	1,431,144	2,051,964	1,367,608
New Zealand	2,493,811	4,078,193	7,457,045	6,503,849	8,055,223
Australasia	26,676,731	31,080,685	52,982,727	72,061,038	65,746,505

* In 1872.

No. 17.—Imports, per head of population.

Colony.	1861.	1871.	1881.	1891.	1897.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
New South Wales	18 13 11	19 11 0	23 2 7	22 3 11	16 11 10
Victoria	25 1 4	16 14 11	19 4 3	18 19 1	13 2 11
Queensland	31 0 3	12 19 9	18 5 8	12 12 11	11 7 0
South Australia	15 15 0	11 13 8	19 4 3	31 2 4	20 2 5
Western Australia	9 9 8	9 0 10	13 14 3	25 2 5	42 16 2
Tasmania	10 12 2	7 13 8	12 5 0	13 15 6	8 1 11
New Zealand	27 18 1	15 16 6	15 2 7	10 6 6	11 3 3
Australasia	21 9 0	16 1 4	19 1 7	18 15 1	15 1 2

No. 18.—Exports.

Colony.	1861.	1871.	1881.	1891.	1897.
	£	£	£	£	£
New South Wales..	6,609,461	11,261,219	16,307,805	25,944,020	23,751,072
Victoria...	13,828,606	14,557,820	16,252,103	16,006,743	16,739,670
Queensland	709,599	2,760,045	3,540,366	8,305,387	9,091,557
South Australia ...	2,032,311	3,582,397	4,508,754	10,642,416	7,070,750
Western Australia	95,789	*209,196	502,770	799,466	3,940,098
Tasmania	905,463	740,638	1,555,576	1,440,818	1,744,461
New Zealand	1,370,247	5,282,084	6,060,866	9,566,397	10,016,993
Australasia	25,551,476	38,393,399	48,728,240	72,705,247	72,354,601

* In 1872.

No. 19.—Exports, per head of population.

Colony.	1861.	1871.	1881.	1891.	1897.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
New South Wales.....	18 14 2	22 3 2	21 9 0	22 13 9	18 2 6
Victoria	25 12 4	19 15 1	18 13 6	13 19 6	14 4 10
Queensland..... ...	22 14 8	22 18 8	15 18 6	20 13 6	19 0 3
South Australia.....	16 3 11	19 7 11	16 5 7	32 19 0	19 11 1
Western Australia	6 2 10	8 6 11	17 0 8	15 13 9	26 5 7
Tasmania	10 1 3	7 6 3	13 6 3	9 13 5	10 6 7
New Zealand	15 6 8	20 10 0	12 5 11	15 3 10	13 17 8
Australasia.....	20 10 10	19 17 0	17 11 0	18 18 6	16 11 5

No. 20.—Total Trade.

Colony.	1861.	1871.	1881.	1891.	1897.
	£	£	£	£	£
New South Wales..	13,213,530	21,196,286	33,894,817	51,327,417	45,495,422
Victoria	27,361,058	26,899,815	32,970,624	37,718,351	32,194,152
Queensland	1,677,550	4,322,710	7,603,991	13,384,391	14,520,748
South Australia ...	4,008,329	5,740,419	9,829,303	20,693,539	14,347,836
Western Australia	243,702	*435,852	907,601	2,079,559	10,358,663
Tasmania	1,859,980	1,518,725	2,986,720	3,492,782	3,112,069
New Zealand	3,864,058	9,360,277	13,517,911	16,070,246	18,072,216
Australasia	52,228,207	69,474,084	101,710,967	144,766,285	138,101,106

* In 1872.

No. 21.—Total Trade, per head of population.

Colony.	1861.	1871.	1881.	1891.	1897.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
New South Wales	37 8 1	41 14 2	44 11 7	44 17 8	34 14 4
Victoria	50 13 8	36 10 0	37 17 9	32 18 7	27 7 9
Queensland	53 14 11	35 18 5	34 4 2	33 6 5	30 7 3
South Australia	31 18 11	31 1 7	35 9 10	64 1 4	39 13 6
Western Australia	15 12 6	17 7 9	30 14 11	40 16 2	69 1 9
Tasmania	20 13 5	14 19 11	25 11 3	23 8 11	18 8 6
New Zealand	43 4 9	36 6 6	27 8 6	25 10 4	25 0 11
Australasia	41 19 10	35 18 4	36 12 7	37 13 7	31 12 7

No. 22.—Trade of Principal Ports—1897.

Port.	Imports.	Exports.	Port.	Imports.	Exports.
	£	£		£	£
Sydney	17,813,058	17,438,592	Port Augusta	16,602	201,841
Newcastle	509,941	1,723,325	Port Darwin	150,701	142,335
Melbourne	13,098,633	15,539,177	Fremantle&Perth	5,509,882	1,615,603
Geelong	142,143	359,544	Albany	360,611	1,528,135
Brisbane	3,115,953	2,120,833	Geraldton	98,990	433,919
Rockhampton	612,281	2,131,855	Hobart	555,949	624,957
Townsville	775,533	1,980,125	Launceston	583,238	602,654
Bundaberg	102,015	212,259	Wellington	1,917,873	1,509,960
Maryborough	202,840	105,707	Auckland	2,132,477	1,365,040
Mackay	81,421	152,379	Lyttelton	1,360,415	2,073,553
Adelaide	4,198,716	4,150,890	Dunedin	1,673,825	1,043,506
Port Pirie	361,902	1,248,080	Invercargill	180,490	664,186

No. 23.—Exports of Domestic Produce, as per Customs' returns.

Colony.	1861.	1871.	1881.	1891.	1897.
	£	£	£	£	£
New South Wales	5,016,891	9,227,108	10,784,327	21,085,712	17,057,543
Victoria	10,596,368	11,151,662	12,480,567	13,026,426	12,829,394
Queensland	698,747	2,407,888	3,478,376	7,979,080	8,831,450
South Australia	1,838,639	3,289,861	3,755,781	4,810,512	2,625,172
Western Australia	95,000	*208,162	498,634	788,873	3,218,569
Tasmania	838,343	730,946	1,548,116	1,367,927	1,721,959
New Zealand	1,339,241	5,171,104	5,762,250	9,400,094	9,596,267
Australasia	20,423,229	32,186,731	38,308,051	58,458,624	55,880,354

* In 1872.

No. 24.—Exports of Domestic Produce, per head of population.

Colony.	1861.	1871.	1881.	1891.	1897.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
New South Wales	14 4 0	18 3 1	14 1 11	18 8 9	13 0 4
Victoria	19 12 7	15 2 7	14 6 10	11 7 6	11 1 8
Queensland	22 7 9	20 0 2	15 12 11	19 17 4	18 9 2
South Australia	14 13 1	17 16 3	13 11 3	14 17 10	7 5 2
Western Australia	6 1 10	8 6 1	16 17 10	15 9 7	21 9 4
Tasmania	9 6 4	7 4 4	13 5 0	9 3 8	10 3 11
New Zealand	14 19 9	20 1 4	11 13 9	14 18 6	13 6 0
Australasia	16 8 5	16 12 10	13 15 11	15 4 4	12 15 11

No. 25.—Excess of Export over Import of Wool—Value.

Colony	1861.	1871.	1881.	1891.	1897.
	£	£	£	£	£
New South Wales	1,537,536	4,705,820	7,173,166	10,650,525	8,027,704
Victoria	2,001,681	4,483,461	2,562,769	3,792,938	2,035,082
Queensland	613,074	1,158,833	1,331,869	3,453,548	2,498,925
South Australia	572,720	1,113,825	1,573,313	1,540,079	963,930
Western Australia.	54,297	122,637	256,690	329,365	295,646
Tasmania	326,413	298,160	498,400	418,460	264,420
New Zealand	523,728	1,606,144	2,914,046	4,129,686	4,442,770
Australasia	5,629,449	13,488,880	16,310,253	24,314,601	18,528,477

No. 26.—Excess of Export over Import of Wool—Weight.

Colony.	1861.	1871.	1881.	1891.	1897.
	lb.	lb.	lb.	lb.	lb.
New South Wales	19,652,000	66,742,670	157,881,700	353,705,669	281,167,119
Victoria	22,456,400	48,011,400	58,832,500	79,777,264	56,506,943
Queensland	13,643,000	31,678,695	32,532,500	89,069,525	86,462,543
South Australia	12,920,000	21,177,600	46,328,200	49,724,663	36,201,315
Western Australia.	778,400	2,013,000	4,107,000	8,783,073	12,736,534
Tasmania	5,570,000	5,546,000	8,269,700	9,639,600	8,131,333
New Zealand	9,617,000	41,225,000	70,787,000	116,553,895	144,205,558
Australasia	84,636,800	216,394,365	378,738,600	707,253,689	625,411,345

NOTE.—In compiling this table, washed and scoured wool has been represented by its equivalent in greasy wool.

No. 27.—Movements of Gold, 1897.

Colony.	Gold Coin and Bullion.		Excess of Exports.
	Imported.	Exported.	
	£	£	£
New South Wales	3,191,465	4,755,385	1,563,920
Victoria	2,093,054	6,472,318	4,379,264
Queensland	30,163	2,628,886	2,598,723
South Australia	35,491	396,792	361,301
Western Australia	47,200	3,191,057	3,143,857
Tasmania	50,000	226,288	176,288
New Zealand	550	1,253,544	1,252,994
Australasia	5,447,923	18,924,270	13,476,347

No. 28.—Live Stock—Sheep.

Colony.	1861.	1871.	1881.	1891.	1897.
	No.	No.	No.	No.	No.
New South Wales	5,615,054	16,278,697	36,591,946	61,831,416	43,952,897
Victoria	6,239,258	10,002,381	10,267,265	12,928,148	*13,180,943
Queensland	4,093,381	7,403,334	8,292,883	20,289,633	17,797,883
South Australia	3,038,356	4,412,055	6,810,856	7,745,541	5,092,078
Western Australia	279,576	670,999	1,267,912	1,962,212	2,210,742
Tasmania	1,714,498	1,305,489	1,847,479	1,662,801	1,588,611
New Zealand	2,761,583	9,700,629	12,985,085	18,128,186	19,687,954
Australasia	23,741,706	49,773,584	78,063,426	124,547,937	103,511,108

* 1894 figures; returns not collected for 1897.

No. 29.—Live Stock—Horned Cattle.

Colony.	1861.	1871.	1881.	1891.	1897.
	No.	No.	No.	No.	No.
New South Wales	2,271,923	2,014,888	2,597,348	2,046,347	2,085,096
Victoria	628,092	799,509	1,286,677	1,812,104	*1,833,900
Queensland	560,196	1,168,235	3,618,513	6,192,759	6,089,013
South Australia	265,434	143,463	314,918	676,933	540,149
Western Australia	33,795	49,593	63,009	133,690	244,971
Tasmania	87,114	101,540	130,526	167,666	157,486
New Zealand	193,285	436,592	698,637	831,831	1,209,165
Australasia	4,039,839	4,713,820	8,709,628	11,861,330	12,159,780

* 1894 figures; returns not collected for 1897.

No. 30.—Live Stock—Horses.

Colony.	1861.	1871.	1881.	1891.	1897.
	No.	No.	No.	No.	No.
New South Wales	233,220	304,100	398,577	459,755	498,034
Victoria	84,057	181,643	278,195	440,696	*431,547
Queensland	28,983	91,910	194,217	399,364	479,280
South Australia ...	52,597	78,125	159,678	202,906	179,792
Western Australia	10,720	22,698	31,755	40,812	62,222
Tasmania	22,118	23,054	25,607	31,262	29,898
New Zealand	28,275	81,028	161,736	211,040	252,834
Australasia ...	459,970	782,558	1,249,765	1,785,835	1,933,607

* 1894 figures; returns not collected for 1897.

No. 31.—Butter, Cheese, and Swine Products, 1897.

Colony.	Dairy Cows.	Butter made.	Cheese made.	Swine.	Bacon and Hams cured.
	No.	lb.	lb.	No.	lb.
New South Wales...	411,498	29,409,966	3,937,168	207,738	6,544,781
Victoria	§457,924	†36,392,000	†4,193,000	‡337,588	§9,892,416
Queensland.....	*	5,685,987	2,291,416	110,855	6,103,485
South Australia.....	73,524	†4,831,000	†946,000	48,664	*
Western Australia..	18,083	270,897	612	31,809	237,102
Tasmania	41,295	*	*	43,520	*
New Zealand	324,485	†25,148,000	†12,121,000	186,027	*
Australasia	.....	.....	.....	966,201	.....

* No returns collected. † Estimated; returns not complete.
‡ 1894 figures; returns not collected for 1897. § 1896 figures; returns for 1897 incomplete.

No. 32.—Mineral Production, 1897.

Colony.	Gold.	Silver and Silver-lead.	Copper.	Tin.	Coal.	Other Minerals.	Total.
	£	£	£	£	£	£	£
New South Wales	1,088,413	1,698,239	283,174	49,900	1,230,041	232,860	4,582,627
Victoria	3,251,064	8,253	...	1,650	108,640	1,397	3,371,004
Queensland	2,553,141	25,118	12,645	37,509	139,889	16,202	2,784,504
South Australia...	120,147	1,522	242,917	10	.....	6,094	370,690
West'rn Australia	2,564,977	.....	1,033	3,275	.....	4	2,569,289
Tasmania	289,241	197,225	323,650	109,126	16,928	74	936,244
New Zealand.....	980,204	20,872	2	...	420,357	*6,590	1,428,025
Australasia ...	10,847,187	1,951,229	863,421	201,470	1,915,855	263,221	16,042,383

* Exclusive of Kauri Gum of the value of £398,010.

No. 33.—Total Mineral Production to end of year 1897.

Colony.	Gold.	Silver and Silver-lead.	Copper.	Tin.	Coal.	Other Minerals.	Total.
	£	£	£	£	£	£	£
New South Wales ..	44,488,371	24,108,285	4,351,343	6,246,418	33,049,372	2,710,842	114,954,631
Victoria	247,389,792	836,234	206,395	691,187	576,947	214,474	249,915,029
Queensland	41,749,606	686,833	2,020,761	4,412,298	2,132,199	226,880	51,228,577
South Australia	2,038,603	104,693	21,280,889	26,022	.....	425,915	23,876,122
Western Australia ..	6,669,018	250	167,849	73,467	.....	369,911	7,280,495
Tasmania	3,673,162	1,276,897	491,876	6,496,680	348,841	10,777	12,298,233
New Zealand.....	53,372,634	202,724	17,868	.....	6,158,481	*213,969	59,965,676
Australasia	399,381,186	27,215,916	28,536,981	17,946,072	42,265,840	4,172,768	519,518,763

* Exclusive of Kauri Gum of the value of £8,512,852.

No. 34.—Production of Gold.

Colony.	1861.	1871.	1881.	1891.	1897.
	oz.	oz.	oz.	oz.	oz.
New South Wales	465,685	323,609	142,627	153,336	292,217
Victoria	1,967,453	1,355,477	858,850	576,400	812,766
Queensland	1,077	171,937	270,945	576,439	729,469
South Australia....	*	*	16,976	35,533	33,899
Western Australia	*	*	*	30,311	674,994
Tasmania	*	6,005	56,693	39,203	77,131
New Zealand	194,031	730,029	270,561	251,996	251,645
Australasia.....	2,628,246	2,587,057	1,623,652	1,663,218	2,872,121

* The quantity of gold found in these years was very small.

No. 35.—Area under Crop.

Colony.	1861.	1871.	1881.	1891.	1897–8.
	acres.	acres.	acres.	acres.	acres.
New South Wales	265,389	390,099	578,243	846,383	1,821,829
Victoria	410,406	851,354	1,435,446	2,116,654	2,746,049
Queensland	4,440	59,969	117,664	242,629	371,857
South Australia ...	400,717	837,730	2,156,407	1,927,689	2,076,555
Western Australia	24,705	51,724	53,353	64,209	133,182
Tasmania	163,385	155,046	148,494	168,121	242,241
New Zealand	68,506	337,282	1,070,906	1,424,777	1,623,651
Australasia ...	1,337,548	2,683,204	5,560,513	6,790,462	9,015,364

NOTE.—Grass and fallow lands are not included.

ERRATA.

In Table No. 34, the production of gold in Queensland in 1897 should read 807,928 ounces instead of 729,469 ounces; and the total for Australasia for the same year, 2,950,580 ounces instead of 2,872,121 ounces.

No. 36.—Area under principal Crops, 1897–8.

Colony.	Wheat.	Maize.	Oats.	Other Grain Crops.	Hay.	Potatoes.	Sugar-cane.	Vines.	Other Crops.	Total.
	acres.	acres.	acres.	acres.	acres.	acres.	acres.	acres.	acres.	acres.
New South Wales	993,350	209,588	28,605	8,080	401,073	23,816	25,865	8,083	123,369	1,821,829
Victoria	1,657,450	10,847	294,183	39,064	580,000	44,197	....	27,696	92,612	2,746,049
Queensland	59,875	109,721	1,834	2,992	48,220	11,778	98,641	2,167	36,629	371,857
South Australia ..	1,522,668	....	31,398	13,232	449,167	6,449	....	18,761	34,880	2,076,555
Western Australia	38,705	243	1,678	2,037	80,938	1,361	....	2,654	5,566	133,182
Tasmania	85,905	....	38,166	4,712	57,828	22,357	....	....	33,273	242,241
New Zealand	315,801	14,837	354,819	31,835	292,635	36,402	....	....	577,322	1,623,651
Australasia ..	4,673,754	345,236	750,683	101,952	1,909,861	146,360	124,506	59,361	903,651	9,015,364

NOTE.—Grass and fallow lands are not included.

No. 37.—Agricultural Production, 1897–8.

Colony.	Wheat.	Maize.	Oats.	Other Grain Crops.	Hay.	Potatoes	Sugar Cane.	Wine.
	bushels.	bushels.	bushels.	bushels.	tons.	tons.	tons.	gallons.
New South Wales	10,560,111	6,713,060	543,946	138,725	405,353	55,332	269,068	864,514
Victoria	10,580,217	515,025	4,809,479	782,239	659,635	67,296	....	*2,750,000
Queensland	1,009,293	2,803,172	31,496	71,159	94,339	35,986	804,815	207,945
South Australia ..	4,014,852	.....	204,444	162,065	298,184	9,308	....	1,283,094
Western Australia	408,595	4,826	29,266	26,340	75,464	4,270	....	*120,000
Tasmania	1,668,341	.....	1,102,285	78,231	78,849	49,124	....	.....
New Zealand	5,670,017	*587,000	9,738,391	749,076	*305,000	*145,000	....	.....
Australasia ..	33,911,426	10,623,083	16,459,307	2,007,835	1,916,824	366,316	1,073,883	5,225,553

* Estimated.

No. 38.—Railways—Mileage open for traffic.

Colony.	1861.	1871.	1881.	1891–2.	1897–8.
	miles.	miles.	miles.	miles.	miles.
New South Wales	73	358	1,040	2,266	2,776
Victoria	114	276	1,247	2,903	3,113
Queensland	.....	218	800	2,320	2,636
*South Australia	56	133	845	1,823	1,889
Western Australia	.....	.....	92	657	1,456
Tasmania	.....	45	168	425	495
New Zealand	.....	105	1,334	2,011	2,222
Australasia	243	1,135	5,526	12,405	14,587

NOTE.—Private lines included. * Including Northern Territory.

No. 39.—Government Railways, 1897–8.

Colony.	Gauge.	Gross Earnings.	Working Expenses.	Net Earnings.	Per Train Mile. Gross Earnings.	Per Train Mile. Working Expenses.	Per Train Mile. Net Earnings.	Cost of Construction and Equipment of Lines open for Traffic.	Interest returned on Capital.
	ft. in.	£	£	£	s. d.	s. d.	s. d.	£	per cent.
New South Wales..	4 8½	3,026,748	1,614,605	1,412,143	7 3·10	3 10·46	3 4·64	37,719,402	3·75
Victoria	5 3	2,608,896	1,646,054	962,842	5 7·77	3 6·76	2 1·01	38,602,304	2·49
Queensland.....	3 6	1,215,811	686,066	529,745	4 10·27	2 8·88	2 1·39	18,056,285	2·93
South Australia..	5 3	984,228	603,474	380,754	5 3·57	3 2·98	2 0·59	12,764,106	2·98
	3 6								
Northern Territory	3 6	14,124	20,268	(–) 6,144	9 4·97	13 6·11	(–)4 1·14	1,155,172	Nil.
Western Australia.	3 6	1,019,677	786,318	233,359	5 7·72	4 2·20	1 3·50	5,047,261	4·62
Tasmania	3 6	166,833	128,544	38,289	4 4·34	3 4·33	1 0·01	3,572,091	1·07
New Zealand.....	3 6	1,376,008	857,191	518,817	7 6·07	4 8·11	2 9·96	15,993,903	3·24
Australasia....	..	10,412,325	6,342,520	4,069,805	6 0·69	3 8·28	2 4·41	132,910,524	3·07

NOTE.—(–) minus = loss.

No. 40.—Government Railways—Net Earnings.

Colony.	1861.	1871.	1881.	1891-2.	1897-8.
	£	£	£	£	£
New South Wales..	13,817	158,257	705,892	1,193,044	1,412,143
Victoria.	.....	†382,438	732,223	956,983	962,842
Queensland.....	*.....	21,660	114,638	413,034	529,745
‡South Australia...	11,186	22,834	128,653	563,905	374,610
Western Australia	*.....	*.....	(–)2,907	3,876	233,359
Tasmania.....	*.....	591	6,721	21,106	38,289
New Zealand.....	*.....	.....	368,927	408,915	518,817
Australasia....	.....	.....	2,054,147	3,560,863	4,069,805

NOTE.—(–)minus = loss. *Railways not in existence. †In 1873. ‡Including Northern Territory.

No. 41.—Length of Telegraph Lines.

Colony.	1861.	1871.	1881.	1891.	1897.
	miles.	miles.	miles.	miles.	miles.
New South Wales..	1,616	*4,674	8,515	11,697	12,778
Victoria.....	... .	*2,295	3,350	7,170	6,947
Queensland	169	2,525	6,280	9,996	10,090
South Australia ...	597	1,183	4,946	5,640	5,525
Western Australia	.....	*750	1,585	2,921	5,958
Tasmania.....	.....	*291	928	2,082	1,484
New Zealand	.....	2,015	3,824	5,349	6,484
Australasia ...	.....	13,733	29,428	44,855	49,266

NOTE.—Submarine cables are not included. * In 1873.

No. 42.—Transmission of Letters and Post-cards.

Colony.	1861.	1871.	1881.	1891.	1897.
	No.	No.	No.	No.	No.
New South Wales	4,369,463	7,509,500	26,355,600	64,153,600	74,024,854
Victoria	6,109,929	11,716,166	26,308,347	†62,526,448	66,216,021
Queensland	515,211	1,792,644	5,178,547	15,345,842	18,370,937
South Australia	1,540,472	3,162,774	10,758,605	17,836,092	19,128,982
Western Australia	193,317	*668,957	995,188	3,192,992	12,898,552
Tasmania	835,873	1,189,994	2,682,329	5,852,381	8,164,384
New Zealand	1,236,768	6,081,607	13,215,235	26,537,545	34,371,916
Australasia	14,801,033	32,121,642	85,493,851	195,444,900	233,175,646
Australasia (Inter-colonial excess excluded)	14,061,000	30,435,300	80,791,700	183,694,900	216,370,000

* In 1872. † In 1890.

No. 43.—Transmission of Letters and Post-cards, per head of population.

Colony.	1861.	1871.	1881.	1891.	1897.
	No.	No.	No.	No.	No.
New South Wales	12·37	14·78	34·45	56·10	56·48
Victoria	11·32	15·90	30·24	†54·59	56·33
Queensland	16·51	14·89	22·86	38·21	38·40
South Australia	12·28	17·12	38·85	55·29	52·90
Western Australia	12·40	*26·68	33·72	64·13	86·03
Tasmania	9·29	11·75	23·04	39·29	48·33
New Zealand	13·84	23·60	26·83	42·12	47·63
Australasia	11·90	16·61	30·79	50·87	53·40
Australasia (Intercolonial excess excluded)	11·31	15·73	29·09	47·81	49·55

* In 1872. † In 1890.

No. 44.—Transmission of Newspapers by post.

Colony.	1861.	1871.	1881.	1891.	1897.
	No.	No.	No.	No.	No.
New South Wales	3,384,245	3,992,100	16,527,900	42,517,300	42,426,394
Victoria	4,277,179	5,172,970	11,440,732	†22,729,005	‡24,750,000
Queensland	427,489	1,307,305	4,530,263	11,896,148	11,496,656
South Australia	1,089,424	2,212,620	5,927,332	8,883,103	9,421,986
Western Australia	137,476	*352,608	715,046	1,665,862	6,744,536
Tasmania	895,656	1,136,338	2,345,700	5,376,142	5,095,792
New Zealand	1,428,351	4,179,784	6,124,021	11,312,200	14,262,345
Australasia	11,639,820	18,353,725	47,610,994	104,379,760	114,197,709
Australasia (Inter-colonial excess excluded)	10,941,400	17,252,700	43,802,000	95,879,760	104,090,000

* In 1872. † In 1890. ‡ Estimated.

No. 45.—Transmission of Newspapers, per head of population.

Colony.	1861.	1871.	1881.	1891.	1897.
	No.	No.	No.	No.	No.
New South Wales	9·58	7·86	21·60	37·18	32·37
Victoria	7·92	7·02	13·15	†19·84	‡21·05
Queensland	13·70	10·86	20·00	29·62	24·03
South Australia	8·68	11·98	21·40	27·54	26·05
Western Australia	8·82	*14·07	24·23	33·46	44·98
Tasmania	9·95	11·22	20·15	36·09	30·17
New Zealand	15·98	16·22	12·44	17·95	19·76
Australasia	9·36	9·49	17·15	27·17	26·15
Australasia (Intercolonial excess excluded)	8·80	8·92	15·77	24·96	23·84

* In 1872. † In 1890. ‡ Estimated.

No. 46.—Public Revenue.

Colony.	1861.	1871.	1881.	1890-1.	1897-8.
	£	£	£	£	£
New South Wales	1,421,831	2,238,900	6,714,327	10,036,185	9,304,249
Victoria	2,952,101	3,734,422	5,186,011	8,343,588	6,887,463
Queensland	238,238	799,005	1,971,208	3,350,223	3,768,152
South Australia	558,587	778,094	2,171,983	2,732,222	2,638,727
Western Australia	67,261	105,300	206,205	497,670	2,754,747
Tasmania	256,958	271,928	505,006	758,100	845,020
New Zealand	691,464	1,342,116	3,757,493	4,193,942	5,079,230
Australasia	6,186,440	9,269,765	20,512,233	29,911,930	31,272,588

No. 47.—Public Revenue, per head of population.

Colony.	1861.	1871.	1881.	1890-1.	1897-8.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
New South Wales	4 0 6	4 8 1	8 15 6	9 2 2	7 0 7
Victoria	5 9 4	5 1 4	5 19 3	7 7 3	5 17 1
Queensland	7 12 8	6 12 9	8 14 1	8 10 6	7 15 6
South Australia	4 9 0	4 4 3	7 16 10	8 11 1	7 5 1
Western Australia	4 6 3	4 4 0	6 19 9	10 15 0	17 0 3
Tasmania	2 17 1	2 13 8	4 6 9	5 5 6	5 0 1
New Zealand	7 14 9	5 4 2	7 12 7	6 14 6	7 0 6
Australasia	4 19 6	4 15 10	7 7 9	7 19 1	7 2 1

No. 48.—Sources of Public Revenue, 1897–8.

Colony.	Taxation.		Railways and Tramways.	Posts and Telegraphs.	Public Lands.	All other Sources.	Total Revenue
	Import and Excise Duties.	Other.					
	£	£	£	£	£	£	£
New South Wales	1,529,830	974,026	3,336,350	728,134	1,966,525	769,384	9,304,249
Victoria	2,110,866	798,164	2,602,547	526,400	384,997	464,489	6,887,463
Queensland	1,323,094	236,551	1,158,657	258,939	560,676	230,235	3,768,152
South Australia	607,226	284,098	1,002,472	255,962	189,781	294,188	2,633,727
Western Australia	1,017,724	96,602	1,035,199	220,912	168,972	215,338	2,754,747
Tasmania	371,215	125,257	169,503	77,136	64,690	37,219	845,020
New Zealand.....	2,007,431	671,145	1,370,572	443,270	263,295	323,517	5,079,230
Australasia	8,967,386	3,185,843	10,675,300	2,510,753	3,598,936	2,334,370	31,272,588

No. 49.—Public Revenue, 1897–8, per head of population.

Colony.	Taxation.		Railways and Tramways.	Posts and Telegraphs.	Public Lands.	All other Sources.	Total Revenue.
	Import and Excise Duties.	Other.					
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
New South Wales	1 3 1	0 14 9	2 10 5	0 11 0	1 9 9	0 11 7	7 0 7
Victoria	1 15 11	0 13 7	2 4 3	0 8 11	0 6 6	0 7 11	5 17 1
Queensland	2 14 7	0 9 9	2 7 10	0 10 8	1 3 2	0 9 6	7 15 6
South Australia	1 13 5	0 15 9	2 15 3	0 14 1	0 10 5	0 16 2	7 5 1
Western Australia	6 5 9	0 11 11	6 7 10	1 7 4	1 0 10	1 6 7	17 0 3
Tasmania	2 3 11	0 14 10	1 0 1	0 9 2	0 7 8	0 4 5	5 0 1
New Zealand.....	2 15 7	0 18 7	1 17 11	0 12 3	0 7 3	0 8 11	7 0 6
Australasia	2 0 9	0 14 6	2 8 6	0 11 5	0 16 4	0 10 7	7 2 1

No. 50.—Net Revenue from Customs and Excise, 1897, as per Departmental returns.

Colony.	Net Revenue from—		Total.
	Customs.	Excise.	
	£	£	£
New South Wales	1,239,084	281,032	1,520,116
Victoria	1,729,130	296,863	2,025,993
Queensland	1,160,404	84,152	1,244,556
South Australia	576,030	36,17[illegible]	612,204
Western Australia	1,062,026	.....	1,062,026
Tasmania	350,947	19,366	370,313
New Zealand	1,912,161	75,297	1,987,458
Australasia	8,029,782	792,884	8,822,666

No. 51.—Public Expenditure (exclusive of Loan Expenditure).

Colony.	1861.	1871.	1881.	1891.	1897-8.
	£	£	£	£	£
New South Wales	1,540,005	2,733,102	5,783,683	10,328,673	9,219,538
Victoria	3,092,021	3,659,534	5,108,642	9,128,699	6,929,084
Queensland	255,180	787,555	1,782,272	3,684,655	3,747,428
South Australia ...	482,951	759,478	2,054,284	2,603,498	2,750,959
Western Australia.	*.....	98,248	197,386	435,623	3,256,912
Tasmania	324,447	287,262	463,684	722,746	785,026
New Zealand	*.....	†931,768	3,675,797	4,081,566	4,602,372
Australasia ...	5,694,604	9,256,947	19,065,748	30,985,460	31,291,319

* Information not available. † Provincial expenditure.

No. 52.—Public Expenditure per head of population.

Colony.	1861.	1871.	1881.	1891.	1897-8.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
New South Wales.....	4 7 2	5 7 7	7 11 2	9 7 6	6 19 4
Victoria	5 14 7	4 19 4	5 17 5	8 1 1	5 17 10
Queensland.....	8 3 6	6 10 10	7 17 4	9 7 6	7 14 8
South Australia	3 17 0	4 2 3	7 8 4	8 3 0	7 11 6
Western Australia	*.....	3 18 5	6 13 9	9 8 3	20 2 3
Tasmania	3 12 0	2 16 9	3 19 8	5 0 7	4 12 11
New Zealand.....	*..... ...	†3 12 4	7 9 3	6 10 11	6 7 4
Australasia	5 0 0	4 15 9	6 17 4	8 4 9	7 2 2

* Information not available. † Provincial expenditure.

No. 53.—Distribution of Public Expenditure, 1897–8.

Colony.	Railways and Tramways, Working Expenses.	Posts and Telegraphs.	Public Instruction.	Interest and Charges on Debt, including Sinking Funds.	All other Services.	Total Expenditure.
	£	£	£	£	£	£
New South Wales ..	1,811,848	694,454	709,138	*2,576,479	3,427,619	9,219,538
Victoria	1,559,404	508,687	530,751	†2,102,056	2,228,186	6,929,084
Queensland	684,566	312,253	248,829	1,324,333	1,177,447	3,747,428
South Australia	627,766	210,271	143,905	951,867	817,150	2,750,959
Western Australia ..	852,648	289,474	49,897	338,263	1,726,630	3,256,912
Tasmania	128,573	65,268	41,966	322,738	226,481	785,026
New Zealand.....	849,923	362,993	466,925	1,741,413	1,181,118	4,602,372
Australasia	6,514,728	2,443,400	2,191,411	9,357,149	10,784,631	31,291,319

* Inclusive of £150,000 paid for redemption of Treasury Bills. † Inclusive of £250,000 paid for redemption of Treasury Bills.

No. 54.—Public Expenditure, 1897–8, per head of population.

Colony.	Railways and Tramways, Working Expenses.	Posts and Telegraphs.	Public Instruction.	Interest and Charges on Debt, including Sinking Funds.	All other Services.	Total Expenditure.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
New South Wales...	1 7 5	0 10 6	0 10 9	1 18 11	2 11 9	6 19 4
Victoria	1 6 6	0 8 8	0 9 0	1 15 9	1 17 11	5 17 10
Queensland	1 8 3	0 12 11	0 10 3	2 14 8	2 8 7	7 14 8
South Australia.....	1 14 7	0 11 7	0 7 11	2 12 5	2 5 0	7 11 6
Western Australia..	5 5 4	1 15 9	0 6 2	2 1 9	10 13 3	20 2 3
Tasmania	0 15 3	0 7 9	0 4 11	1 18 2	1 6 10	4 12 11
New Zealand.....	1 3 6	0 10 1	0 12 11	2 8 2	1 12 8	6 7 4
Australasia.....	1 9 7	0 11 1	0 9 11	2 2 6	2 9 1	7 2 2

No. 55.—Loan Expenditure and Public Debt, 1897–8.

Colony.	Loan Expenditure on Public Works during 1897–8.	Public Debt, 1898.			‡ Interest Charge on Debt.
		Fixed Debt.	Floating Debt.	† Total.	
	£	£	£	£	£
New South Wales.	1,642,867	60,781,136	2,331,584	63,112,720	2,298,974
Victoria	462,094	47,058,088	500,000	47,558,088	1,842,976
Queensland.....	937,066	33,598,414	.....	33,598,414	1,274,244
South Australia....	495,192	24,064,635	244,400	24,309,035	953,119
Western Australia	1,896,144	7,900,208	1,303,530	9,203,738	325,994
Tasmania	79,602	7,781,570	608,456	8,390,026	318,731
New Zealand	1,134,812	44,963,424	*.....	44,963,424	1,750,659
Australasia....	6,647,777	226,147,475	4,987,970	231,135,445	8,764,697

* £730,000 Treasury Bills issued in anticipation of Revenue are not included in Debt.

† Against these amounts are to be placed the following accumulated Sinking Funds:—New South Wales, £48,969; South Australia, £18,750; Western Australia, £255,784; Tasmania, £135,292; New Zealand, £881,903.

‡ Calculated on the assumption that the Debt as shown in the preceding column is outstanding for the whole of the next financial year.

No. 56.—Public Debt.

Colony.	1861.	1871.	1881.	1891.	1898.
	£	£	£	£	£
New South Wales..	4,017,630	10,614,330	16,924,019	52,950,733	63,112,720
Victoria.....	6,345,060	11,994,800	22,426,562	43,638,897	47,558,088
Queensland	70,000	4,047,850	13,245,150	29,457,134	33,598,414
South Australia ...	866,500	2,167,700	11,196,800	20,347,125	24,309,035
Western Australia	.....	.....	511,000	1,613,594	9,203,738
Tasmania	.....	1,315,200	2,003,000	7,110,290	8,390,026
New Zealand	600,761	8,900,991	29,659,111	38,844,914	44,963,424
Australasia ...	11,899,951	39,040,871	95,965,582	193,962,687	231,135,445

No. 57.—Public Debt, per head of population.

Colony.	1861.	1871.	1881.	1891.	1898.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
New South Wales	11 4 5	20 10 0	21 14 8	45 8 10	47 4 11
Victoria	11 14 3	16 0 11	25 9 7	37 13 11	40 13 4
Queensland	2 0 9	32 6 11	58 7 2	71 15 9	68 1 1
South Australia	6 16 8	11 13 7	39 2 1	32 9 2	67 5 0
Western Australia	.....	.....	17 0 6	30 5 8	53 16 8
Tasmania	.....	12 18 5	16 16 10	46 11 9	48 17 2
New Zealand	6 1 4	33 6 9	59 4 2	61 5 3	61 9 0
Australasia	9 8 0	19 16 4	34 0 2	49 14 11	52 2 4

No. 58.—Loan Expenditure on Public Works, 1897–8.

Colony.	Works yielding direct Revenue.				Other Works and Services.	Total.
	Railways and Tramways.	Water Supply and Sewerage.	Telegraphs and Telephones.	Total.		
	£	£	£	£	£	£
New South Wales	419,473	538,623	34,257	992,353	650,514	1,642,867
Victoria	259,163	45,871	.....	305,034	157,060	462,094
Queensland	626,974	8,198	36,100	671,272	265,794	937,066
South Australia	163,636	137,517	8,001	309,154	186,038	495,192
Western Australia	1,400,794	75,757	.....	1,476,551	419,593	1,896,144
Tasmania	10,644	.....	2,732	13,376	66,226	79,602
New Zealand	351,600	33,117	29,384	414,101	720,711	1,134,812
Australasia	3,232,284	839,083	110,474	4,181,841	2,465,936	6,647,777

No. 59.—Loan Expenditure on Public Works, 1897–8, per head of population.

Colony.	Works yielding direct Revenue.				Other Works and Services.	Total.
	Railways and Tramways.	Water Supply and Sewerage.	Telegraphs and Telephones.	Total.		
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
New South Wales	0 6 4	0 8 2	0 0 6	0 15 0	0 9 10	1 4 10
Victoria	0 4 5	0 0 9	.....	0 5 2	0 2 8	0 7 10
Queensland	1 5 10	0 0 4	0 1 6	1 7 8	0 11 0	1 18 8
South Australia	0 9 0	0 7 7	0 0 5	0 17 0	0 10 3	1 7 3
Western Australia	8 13 0	0 9 4	.....	9 2 4	2 11 10	11 14 2
Tasmania	0 1 3	.....	0 0 4	0 1 7	0 7 10	0 9 5
New Zealand	0 9 9	0 0 11	0 0 10	0 11 6	0 19 11	1 11 5
Australasia	0 14 8	0 3 10	0 0 6	0 19 0	0 11 3	1 10 3

No. 60.—Total Loan Expenditure on Public Works to 1897–8.

Colony.	Works yielding direct Revenue.				Other Works and Services.	Total.
	Railways and Tramways.	Water Supply and Sewerage.	Telegraphs and Telephones.	Total.		
	£	£	£	£	£	£
New South Wales ..	40,693,272	8,325,207	969,653	49,988,132	10,199,909	60,188,041
Victoria	35,948,297	8,098,156	.....	44,046,453	2,837,818	46,884,271
Queensland	20,104,962	320,025	890,092	21,315,079	9,529,271	30,844,350
South Australia	12,952,978	3,843,525	897,316	17,693,819	5,928,328	23,622,147
Western Australia ..	5,944,624	99,751	269,308	6,313,683	2,174,922	8,488,605
Tasmania	3,696,104	.....	120,719	3,816,823	3,846,504	7,663,327
New Zealand..... ..	15,658,174	631,276	800,735	17,090,185	25,624,337	42,714,522
Australasia	134,998,411	21,317,940	3,947,823	160,264,174	60,141,089	220,405,263

No. 61.—Total Loan Expenditure on Public Works to 1897–8, per head of population.

Colony.	Works yielding direct Revenue.									Other Works and Services.			Total.		
	Railways and Tramways.			Water Supply and Sewerage.			Telegraphs and Telephones.			Total.					
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
New South Wales..	30	9	3	6	4	8	0	14	6	37	8	5	7	12	9	45	1	2
Victoria	30	14	10	6	18	6	.....			37	13	4	2	8	6	40	1	10
Queensland	40	14	5	0	13	0	1	16	1	43	3	6	19	6	0	62	9	6
South Australia ..	35	16	8	10	12	8	2	9	8	48	19	0	16	8	0	65	7	0
Western Australia..	34	15	5	0	11	8	1	11	6	36	18	7	12	14	5	49	13	0
Tasmania	21	10	6	.....			0	14	1	22	4	7	22	8	0	44	12	7
New Zealand.....	21	8	0	0	17	3	1	1	11	23	7	2	35	0	5	58	7	7
Australasia ...	30	8	10	4	16	2	0	17	9	36	2	9	13	11	3	49	14	0

No. 62.—Public Estate at close of 1897.

Colony.	Area of Colony.		Area Alienated or in process of Alienation.	Area Leased.	Area neither Alienated nor Leased.
	In square miles.	In acres.			
	sq. miles.	acres.	acres.	acres.	acres.
New South Wales	310,700	198,848,000	45,738,687	124,184,284	28,925,029
Victoria†	87,884	56,245,760	24,245,886	17,505,858	14,494,016
Queensland	668,497	427,838,080	14,814,093	245,966,061	167,057,926
South Australia...	903,690	578,361,600	14,386,445	229,737,207	334,237,948
Western Australia	975,920	624,588,800	8,847,044	88,122,828	527,618,928
Tasmania.....	26,215	16,778,000	4,768,901	891,244	11,117,855
New Zealand.....	104,471	66,861,440	22,107,234	14,547,731	*30,206,475
Australasia ...	3,077,377	1,969,521,680	134,908,290	720,955,213	1,113,658,177

* Including 10,276,032 acres native lands. † On 30th June, 1898.

No. 63.—State Schools, 1897.

Colony.	Schools.	Teachers.	Net Enrolment of Scholars.	Average Attendance.
	No.	No.	No.	No.
New South Wales	2,577	4,626	201,947	148,381
Victoria	1,874	4,712	210,951	140,463
Queensland	797	1,825	77,757	59,748
South Australia	656	1,242	61,691	42,219
Western Australia	167	371	12,257	8,970
Tasmania	282	520	16,634	12,022
New Zealand	1,585	3,628	132,197	110,523
Australasia	7,938	16,924	713,434	522,326

No. 64.—Savings Banks, 1897-8.

Colony.	Number of Depositors in—			Amount of Deposits in—			Average Amount of Deposits.
	Post Office Savings Banks.	Other Savings Banks.	Total.	Post Office Savings Banks.	Other Savings Banks.	Total.	
	No.	No.	No.	£	£	£	£ s. d.
New South Wales	151,343	76,286	227,629	4,691,833	4,444,960	9,136,793	40 2 9
Victoria	.....	338,260	338,260	.....	8,099,364	8,099,364	23 18 11
Queensland	.....	68,124	68,124	.....	2,799,687	2,799,687	41 1 11
South Australia	.....	96,401	96,401	.....	3,069,752	3,069,752	31 16 10
Western Australia	26,317	.....	26,317	856,084	.....	856,084	32 10 7
Tasmania	9,163	25,705	34,868	155,750	588,163	743,913	21 6 8
New Zealand	159,331	28,623	187,954	4,744,925	775,154	5,520,079	29 7 5
Australasia	346,154	633,399	979,553	10,448,592	19,777,080	30,225,672	30 17 1

No. 65.—Depositors in Savings Banks.

Colony.	1871.	1881.	1891.	1897-8.
	No.	No.	No.	No.
New South Wales	24,379	72,384	158,426	227,629
Victoria	45,819	101,829	300,781	338,260
Queensland	6,769	20,168	46,259	68,124
South Australia	14,270	37,742	78,795	96,401
Western Australia	1,062	3,219	3,564	26,317
Tasmania	8,500	14,728	26,916	34,868
New Zealand	14,275	61,054	126,886	187,954
Australasia	115,074	311,124	741,627	979,553

No. 66.—Deposits in Savings Banks.

Colony.	1871.	1881.	1891.	1897-8.
	£	£	£	£
New South Wales	945,915	2,698,703	5,342,135	9,136,793
Victoria	1,117,761	2,569,438	5,715,687	8,099,364
Queensland	407,134	944,251	1,660,753	2,799,687
South Australia	517,000	1,288,450	2,217,419	3,069,752
Western Australia	15,583	23,344	46,181	856,084
Tasmania	217,413	369,278	554,417	743,913
New Zealand	454,966	1,549,515	3,406,949	5,520,079
Australasia	3,675,772	9,442,979	18,943,541	30,225,672

No. 67.—Liabilities of Banks of Issue, June Quarter, 1898.

Colony.	Notes in Circulation.	Bills in Circulation.	Balances due to other Banks.	Deposits.			Total Liabilities.
				Not bearing Interest.	Bearing Interest.	Total.	
	£	£	£	£	£	£	£
New South Wales	1,213,236	120,082	63,598	11,269,227	18,760,207	30,029,434	31,426,350
Victoria	887,375	193,845	267,136	10,418,363	18,369,476	28,787,839	30,136,195
Queensland	.....	144,791	59,140	4,283,327	7,871,663	12,154,990	12,358,921
South Australia	372,210	9,169	57,170	2,304,595	3,974,752	6,279,347	6,717,896
Western Australia	340,678	61,331	51,046	2,633,568	975,703	3,609,271	4,062,326
Tasmania	125,950	12,875	37,947	1,701,321	1,279,631	2,980,952	3,157,724
New Zealand	1,091,985	46,777	35,923	5,835,043	8,400,812	14,235,855	15,410,540
Australasia	4,031,434	588,870	571,960	38,445,444	59,632,244	98,077,688	103,269,952

No. 68.—Assets of Banks of Issue, June Quarter, 1898.

Colony.	Coin.	Bullion.	Landed Property.	Notes and Bills of other Banks.	Balances due from other Banks.	All other Debts due to the Banks.	Total Assets.
	£	£	£	£	£	£	£
New South Wales	5,745,965	139,571	1,809,956	217,145	371,023	34,281,440	42,565,100
Victoria	6,231,596	476,526	1,983,760	270,332	353,346	34,125,106	43,440,666
Queensland	1,646,154	269,979	717,817	*578,019	192,443	13,122,727	16,527,139
South Australia	2,015,527	14,133	493,296	37,118	68,055	4,555,200	7,183,329
Western Australia	1,622,741	185,477	157,862	47,285	136,758	3,265,380	5,415,503
Tasmania	806,702	....	122,210	....	37,917	2,388,651	3,355,480
New Zealand	2,677,259	116,465	467,343	51,637	25,663	13,539,950	16,878,317
Australasia	20,745,944	1,202,151	5,752,244	1,201,536	1,185,205	105,278,454	135,365,534

* Including Treasury Notes, £550,960.

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Sydney : William Applegate Gullick, Government Printer.—1898.